Traffic Impact Study

Crossroads North

Colorado Springs and El Paso County, Colorado

PCD File No. SP-20-7

Prepared for:

Pikes Peak Investments LLC

c/o The Equity Group

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

Traffic Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Jeffrey R. Planck

Jeffrey R. Planck, P.E., PE #53006

November 20, 2023
Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Ms. Kelly Nelson
Pikes Peak Investments LLC
c/o The Equity Group
90 South Cascade Avenue, Suite 1500
Colorado Springs, CO 80903

Date

Crossroads North

PCD File No. SP-20-7

Colorado Springs and El Paso County, Colorado

Prepared for
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November 2023

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1.0 EXECUTIVE SUMMARY

Crossroads North is a mixed-use development proposed to be located on the northwest corner of the SH-94 and Marksheffel Road intersection in El Paso County and Colorado Springs, Colorado. Marksheffel Road within the project limits is anticipated to be annexed into the City of Colorado Springs. Crossroads North proposes to contain retail uses and a park/sports complex. Crossroads North is expected to be a 10-year build. As such, an initial phase of development was evaluated in a 2026 horizon while full buildout was evaluated in the long-term 2040 horizon.

The purpose of this study is to identify project traffic generation characteristics, to identify potential project traffic related impacts on the local street system, and to develop mitigation measures required for identified impacts. The following intersections were incorporated into this traffic study in accordance with the City of Colorado Springs, El Paso County, and Colorado Department of Transportation (CDOT) standards and requirements:

- US-24 and Marksheffel Road (#1)
- SH-94/Newt Drive and US-24 (#2)
- SH-94 and Marksheffel Road (#3)

In addition, two project accesses (#4 and #5) proposed along Marksheffel Road were included for evaluation. Further four (4) internal intersections (#6-9) along public roadways proposed within Crossroads North were also included for evaluation.

Regional access to the project is provided by Interstate 25 (I-25) and US-24. Primary access to the project will be provided by SH-94 and Marksheffel Road. Direct access to the proposed project is to be provided by two project accesses located along Marksheffel Road.

Phase 1 development of the project in 2026 is expected to generate approximately 11,246 daily weekday external vehicle trips with 927 of these trips occurring during the morning peak hour and 899 trips occurring during the afternoon peak hour. With full buildout of the development by 2040, the project is expected to generate approximately 16,066 daily weekday external vehicle trips with 1,037 of these trips occurring during the morning peak hour and 1,269 trips occurring during the afternoon peak hour.

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns and volumes, anticipated surrounding development areas, expected roadway improvements, and the proposed access system for the project. Assignment of project traffic was based upon the trip generation described previously and the distribution developed for the project area. Assigned traffic was added to future traffic volumes projected at the study area intersections to conduct a traffic analysis for the determination of possible improvements needed to surrounding street system.

Based on the complete analysis of the project area including existing and background traffic volumes from other sources and developments presented in this report, Kimley-Horn believes the Crossroads North development will be successfully incorporated into the existing and future roadway network. All of the area traffic combined including the proposed background traffic volume growth, project development, and expected future traffic volumes in the 2026 and 2040 full buildout horizons resulted in the following conclusions and recommendations:

2026 Recommendations:

- CDOT will likely require Access Permits for the intersections of SH-94/US-24 (#2) and SH-94/Marksheffel Road (#3) in association with the project.

- To maintain acceptable operations the signal timings at US-24/Marksheffel Road (#1) intersection may need to be optimized by 2026, with or without the addition of project traffic.

- The intersection of SH-94/US-24 (#2) currently operates poorly during the peak hours in the existing condition. As a regional capacity improvement, it was found that US-24 may need to provide three through lanes in each direction from the Peterson Road interchange through this intersection with SH-94 in the near-term horizon. The additional through lanes should be considered by CDOT in the near future. If and when US-24 is improved to provide three through lanes in each direction, it is recommended that a separate 600-foot plus 225-foot taper right turn deceleration lane be constructed to maintain free right turn movements to eastbound SH-94. For southwestbound US-24 at SH-94 (#2), the existing acceleration lane along US-24 will need to be reconstructed with 960 feet of length plus a 225-foot taper if and when US-24 is improved to provide three through lanes along westbound US-24. For

northeastbound US-24 at SH-94, it is recommended that this acceleration lane be converted to the third northbound through lane as the acceleration lane is not warranted. Further, the northeastbound US-24 third through lane needs to continue for 1,200 feet plus provide a 660-foot taper based on MUTCD standards. In addition to these regional improvements, it is recommended that the existing single 900-foot left turn lane be changed to 850-feet plus 225-foot taper with dual left turn lanes on the northeastbound US-24 approach for the left turn to Newt Drive. The area for these dual lefts is presently available (mostly); however, the lane is striped out which will require restriping with a slight extension that may also need to be constructed. Also, at the intersection of US-24 and SH-94 (#2), the existing dual westbound left turn lanes on SH-94 should be converted to triple left turn lanes by restriping the inside westbound through lane to a left turn lane. The inside two westbound left turn lanes should be extended to a length of 760 feet plus a 225-foot taper per CDOT requirements. Three receiving lanes will be available with the expansion of US-24 to three westbound lanes to the Peterson Road interchange off-ramp. A traffic signal modification will be required at the intersection to incorporate all of these improvements. As requested by CDOT, an additional analysis was performed with an interchange grade separation including a westbound left turn flyover ramp condition. With this westbound left turn flyover ramp and the existing two through lanes in each direction along US-24, the intersection of SH-94 and US-24 (#2) is expected to operate acceptably with LOS D during the peak hours in 2026 and LOS E during the peak hours in 2040. With three through lanes in each direction along US-24 and the implementation of the westbound let turn flyover ramp, this intersection is expected to operate acceptably during the peak hours in 2040.

- At SH-94 and Marksheffel Road (#3), it was found that the eastbound and westbound right turns should operate with overlap phasing, while the northbound and southbound right turns should operate with free movements with acceleration lanes constructed in accordance with the CDOT State Highway Access Code. The acceleration lane along westbound SH-94 is recommended to tie into the outside through lane on the approach to US-24. The eastbound left turn lane shall be extended to a length of 750 feet with a 225-foot taper while the westbound left turn lane should be extended to a length of 650 feet with a 225-foot taper. The eastbound and westbound right turn lanes should be extended to 600 feet. The eastbound acceleration lane from the Marksheffel Road northbound right turn should be constructed to

1,380 feet with a 300-foot taper. These improvements at this intersection may already be identified with the SH-94 improvements already being planned by CDOT.

- A traffic signal is anticipated to be needed and warranted at the south full movement access intersection (#5) along Marksheffel Road for Crossroads North. Therefore, a traffic signal is recommended for installation at this access intersection with development of Crossroads North. To meet Colorado Springs standards, the northbound left turn at the Marksheffel Road South Access (#5) should provide a turn lane length of 390 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper. Lastly, separate eastbound left turn and right turn lanes are recommended to serve exiting traffic out of Crossroads North at this access.

- The Marksheffel Road North Access (#4) should operate as a three-quarter intersection with a R1-1 "STOP" sign installed on the eastbound approach. Based on Colorado Springs standards, the northbound left turn at the Marksheffel Road North Access (#4) should provide a turn lane length of 295 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper. A sensitivity analysis has been prepared later in Section 5.8 comparing the north access along Marksheffel Road as a full movement signalized intersection and a three-quarter movement unsignalized intersection.

- An internal street evaluation was conducted for the Crossroads North development area. The south access to Crossroads North along Marksheffel Road is proposed to be named Air Lane and is expected to be classified as an El Paso County Urban Non-Residential Collector roadway with a 60-foot right-of-way (ROW). Air Lane extends east/west and is proposed to connect with a north/south extending Non-Residential Collector Street (#7). Intersection #7 (collector to collector) is proposed to be located approximately 525 feet west of Marksheffel Road. The north/south extending Non-Residential Collector Street also connects with an east/west collector street (#6) that extends from the north access to Marksheffel Road. The north access street connecting with Marksheffel Road is proposed to be classified as an El Paso County Urban Non-Residential Collector roadway. To meet El Paso County standards for a design speed of 35 mph, the recommended left-turn lanes and right turn lanes internal to Crossroads North should provide 135 feet of deceleration length plus 140-foot tapers while

all left turn lanes and right turn lanes that require a stop will also provide a storage length (determined from ECM Table 2-30 for each location).

- To meet El Paso County standards, it is recommended that a 335-foot eastbound right turn lane be designated at south access along Marksheffel Road (#5). It is recommended that a 235-foot westbound right turn lane be designated at the Crossroads North internal intersection #6. A 135-foot westbound right turn lane is recommended to be designated at the Air Lane Intersection (#7).

2040 Recommendations:

- If future traffic volume projections are realized, US-24 may need to provide three through lanes in each direction through the Marksheffel Road intersection. Likewise, Marksheffel Road between US-24 and Peterson Air Force Base East Gate may need to provide three through lanes in each direction. It is recommended that traffic volumes continue to be monitored by CDOT and the City of Colorado Springs, as applicable, to determine if and when these regional improvements will be needed. It is understood that US-24 and Marksheffel Road are identified with four-lane cross-sections. If future traffic projections are realized, additional right-of-way may need to be dedicated to account for six-lane cross sections along both US-24 and Marksheffel Road within the study limits.

- To maintain acceptable operations the signal timings at SH-94/Marksheffel Road (#3) intersection may need to be optimized by 2040, with or without the addition of project traffic.

- Several extensions of auxiliary turn lanes may be needed by 2040 and should be monitored by CDOT and the City of Colorado Springs, as applicable, to determine if and when the recommended turn lane lengths will be needed.

General Recommendations:

- Any on-site and off-site roadway, signing, striping, and signal improvements should be incorporated into the Civil Drawings, and conform to City of Colorado Springs and/or CDOT standards as applicable, as well as the Manual on Uniform Traffic Control Devices – 2009 Edition (MUTCD.

2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) has prepared this report to document the results of a Traffic Impact Study of future traffic conditions associated with the Crossroads North development to be located on the on the northwest corner of the SH-94 and Marksheffel Road intersection in El Paso County and Colorado Springs, Colorado. Marksheffel Road within the project limits is anticipated to be annexed into the City of Colorado Springs. Crossroads North proposes to contain retail uses and a park/sports complex. A vicinity map illustrating the location of the development area is shown in **Figure 1**. A conceptual site plan for the development area is attached in **Appendix I**.

Crossroads North is proposed to be located on the northwest corner of the SH-94 and Marksheffel Road intersection. Crossroads North is expected to be a 10-year build. As such, an initial phase of development was evaluated in a five-year 2026 horizon while full buildout was evaluated in the long-term twenty-year 2040 horizon.

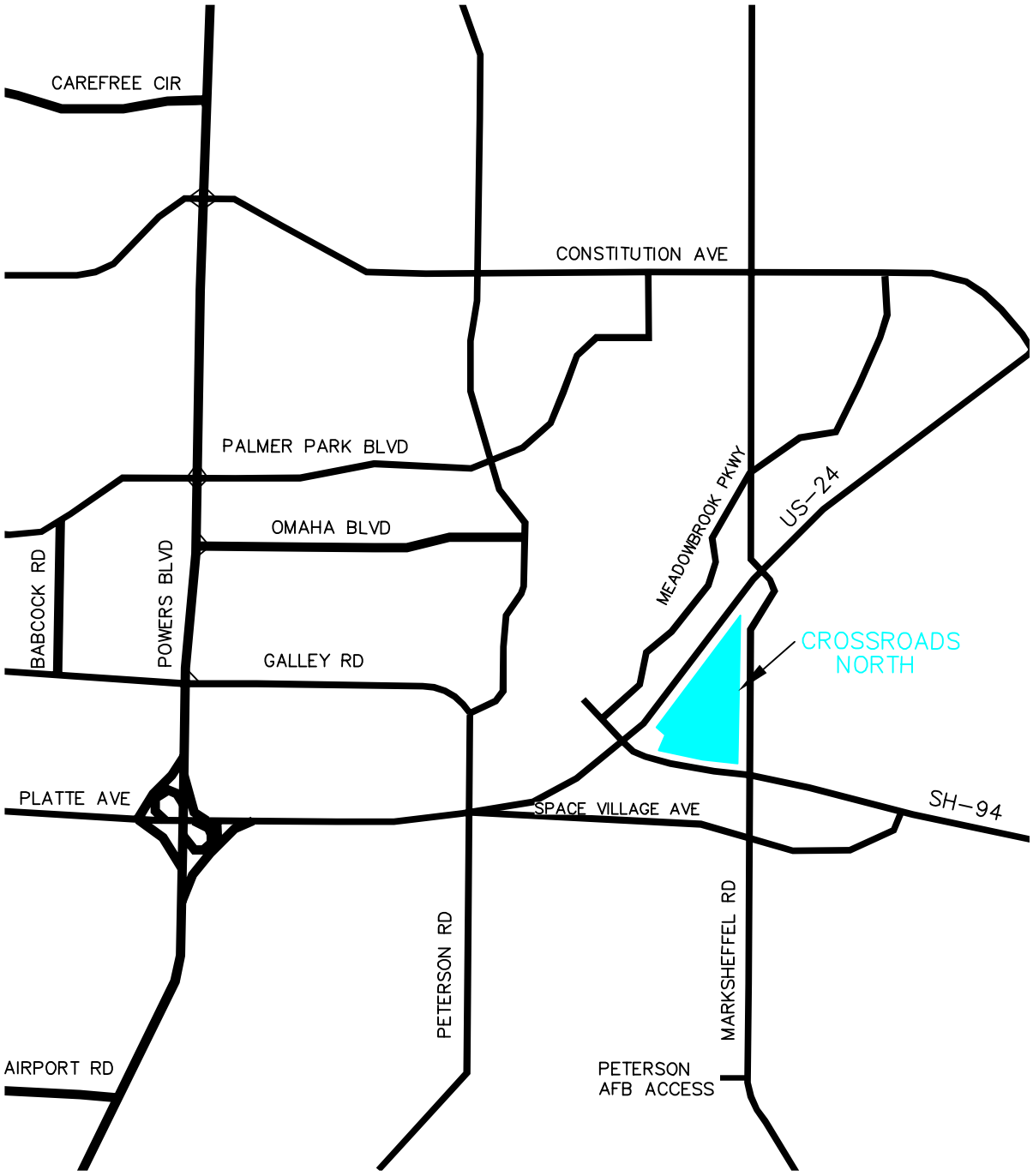
The purpose of this study is to identify project traffic generation characteristics, to identify potential project traffic related impacts on the local street system, and to develop mitigation measures required for identified impacts. The following intersections were incorporated into this traffic study in accordance with the City of Colorado Springs, El Paso County, and Colorado Department of Transportation (CDOT) standards and requirements:

- US-24 and Marksheffel Road (#1)
- SH-94/Newt Drive and US-24 (#2)
- SH-94 and Marksheffel Road (#3)

In addition, two project accesses (#4 and #5) proposed along Marksheffel Road were included for evaluation. Further two (2) internal intersections (#6 and #7) along public roadways proposed within Crossroads North were also included for evaluation.

Regional access to the project is provided by Interstate 25 (I-25) and US-24. Primary access to the project will be provided by SH-94 and Marksheffel Road. Direct access to the proposed project is to be provided by two project accesses located along Marksheffel Road.

Kimley»Horn
NORTH
NTS 096956012



CROSSROADS NORTH
COLORADO SPRING, CO
VICINITY MAP

FIGURE 1

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3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing and Future Study Area

The existing site area is comprised of vacant land. The surrounding area contains a mix of uses. Directly east of Crossroads North is an existing water treatment plant. The surrounding area to the east and south is vacant land. Directly to the west is mainly residential neighborhoods. Other industrial uses are proposed to the north. Outside of these uses, Peterson Air Force Base and the Colorado Springs Airport exists to the south and southwest. The site area is shown in the aerial of **Figure 2**.

3.2 Existing and Future Roadway Network

Regional access to the project is provided by Interstate 25 (I-25) and US-24. Primary access to the project will be provided by SH-94 and Marksheffel Road. Direct access to Crossroads North is proposed from the northern three-quarter access (#4) and the southern full movement access (#5) along Marksheffel Road approximately 2,000 feet and 1,000 feet north of SH-94.

SH-94 is a CDOT Highway, categorized E-X: Expressway, Major Bypass that provides one through lane of travel both eastbound and westbound in the vicinity of the site. SH-94 has a 40 mile per hour speed limit at US-24, a 55-mph speed limit through the Marksheffel Road intersection and a 65-mph speed limit east of Marksheffel Road. US-24 is a CDOT Highway, categorized E-X: Expressway, Major Bypass that provides two through lanes of travel with a 55 mile per hour speed limit through the study area. Marksheffel Road provides two through lanes of travel in each direction, northbound and southbound, with a 55 mile per hour speed limit through the study area.

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NORTH
NTS 096956012

CROSSROADS NORTH
COLORADO SPRINGS, CO
SITE AREA

FIGURE 2

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The US-24 and Marksheffel Road (#1) intersection is a four-leg signalized intersection. The eastbound and westbound US-24 approaches consist of dual left turn lanes, two through lanes, and a right turn lane with free movements while the northbound and southbound Marksheffel Road approaches consist of a left turn lane, two through lanes, and separate right turn lanes operating with free right turn movements.

The intersection of SH-94 and US-24 (#2) is signalized with four-legs. Both state highways run east-west, however the traffic software for this intersection assigned SH-94 as east-west and US-24 as north-south. The eastbound Newt Drive approach consists of dual left turn lanes, one through lane, and a free right turn lane. The westbound SH-94 approach consists of dual left turn lanes, two through lanes, and a free right turn lane. The US-24 approaches each consist of a left turn lane, two through lanes, and a right turn lane.

The SH-94 and Marksheffel Road (#3) intersection is a four-leg signalized intersection. The eastbound and westbound approaches consist of a left turn lane, one through lane, and one right turn lane. The northbound and southbound approaches consist of a left turn lane, two through lanes, and a right turn lane. Existing intersection lane configurations and control for the study area are shown in **Figure 3**.

3.3 Existing Traffic Volumes

Due to the effects on traffic from COVID-19, traffic counts at each intersection were derived by different methodologies. Existing peak hour turning movement counts, pedestrian counts, heavy vehicle percentages, and bicycle counts were conducted at the intersection of US-24/Marksheffel Road (#1) on Thursday, June 4, 2020, and at the intersections of SH-94/US-24 (#2) and SH-94/Marksheffel Road (#3) on Tuesday, June 2, 2020. The weekday counts were conducted in 15-minute intervals during the AM and PM peak hours of adjacent street traffic from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. The turning movement counts were grown based on data obtained from hourly counts from the CDOT OTIS database and additional historical CDOT traffic information provided to Kimley-Horn to account for a COVID-19 adjustment for this area. Based on this information and through coordination with CDOT, the morning and afternoon peak hour counts were adjusted by 35 percent except for the counts at the intersection of SH-94 and

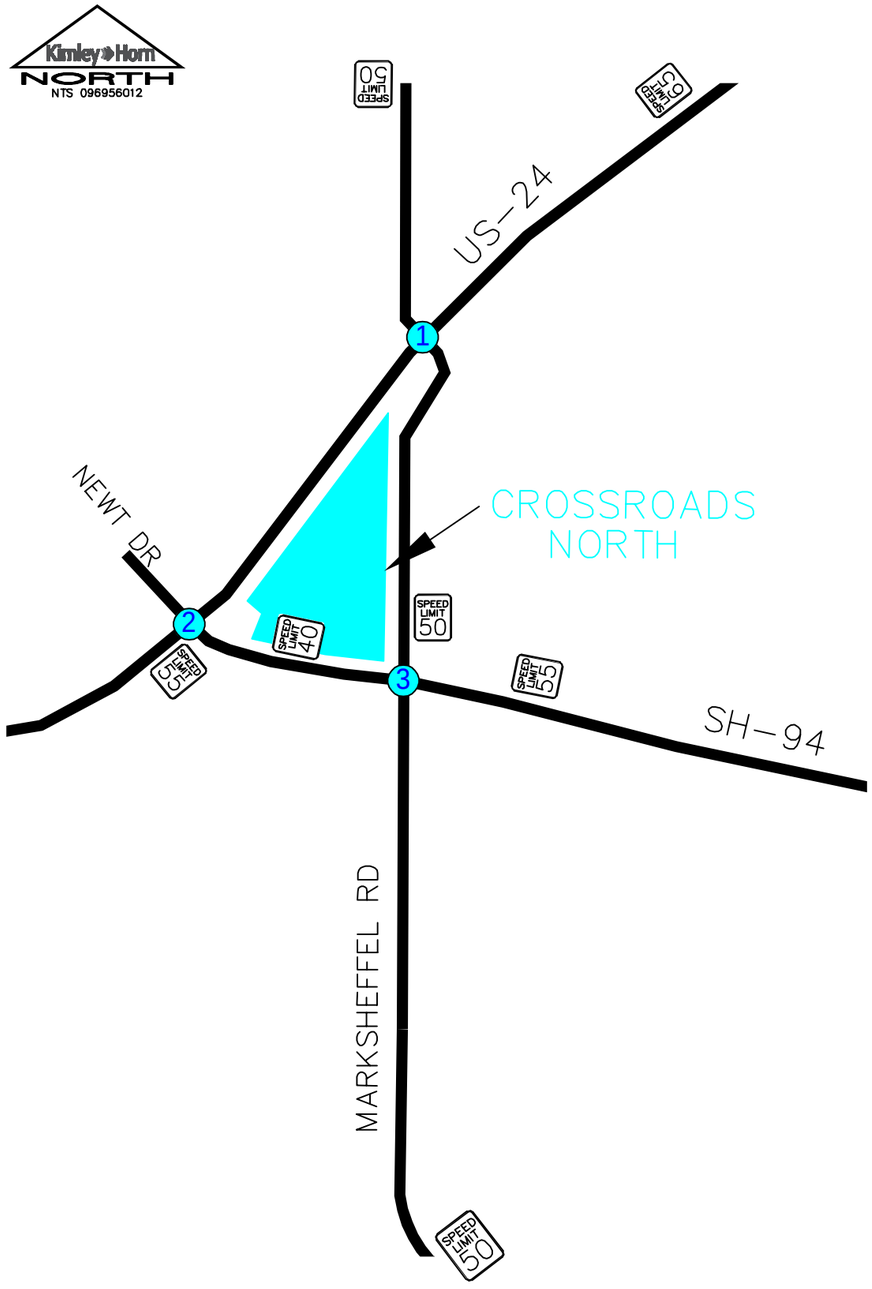
Marksheffel Road (#3) which were not adjusted in the morning peak hour but were adjusted by 44 percent for the afternoon peak hour.

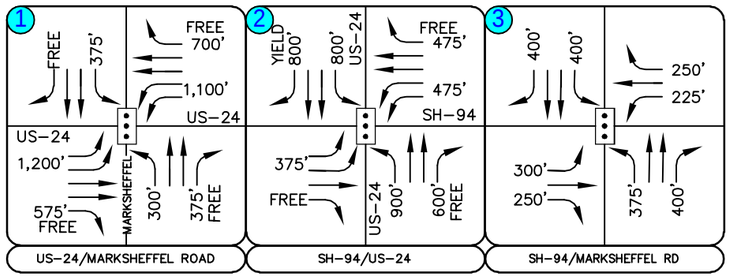
Existing turning movement counts are shown in **Figure 4** while the adjusted turning movement counts are shown in **Figure 5** with count sheets and COVID-19 count adjustment data provided in **Appendix A**. It should be noted that heavy vehicle percentages are documented in the count sheets and these percentages were used in the intersection operational analysis.

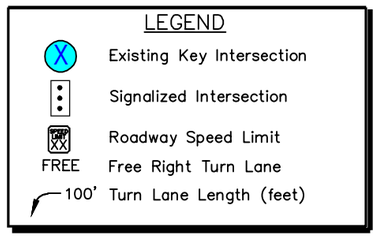
3.4 Unspecified Development Traffic Growth

According to information provided on the website for the Colorado Department of Transportation (CDOT), the average 20-year growth factor along SH-94 in the vicinity of the site is 1.29. This value equates to an annual growth rate of 1.16 percent. SH-94 traffic information from the CDOT Online Transportation Information System (OTIS) website is included in **Appendix B**. Based on this, an annual growth rate of 1.16 percent was used to calculate future traffic volumes within the project study area. This annual growth rate was used to estimate near term 2026 and long term 2040 traffic volume projections at the key intersections.

In addition to the applied annual traffic growth rates, project traffic volumes from Meadowbrook Park, Crossroads Mixed Use, and Reagan Ranch developments were included as background traffic volumes. Along with the annual growth and other background development studies, calculated trips from an additional 1,123 single family detached housing units, located in the parcels east of the southeast area of Reagan Ranch, were added to the 2040 background volumes. Further, project traffic from the single-family housing development to the west at Newt Drive were estimated based on the number of homes yet to be occupied and added to the background traffic volumes. The Pikes Peak Area Council of Governments (PPACOG) 2040 traffic volume projections were used as a comparison to future traffic volume projections with this study. All future average daily traffic volume projections in this study exceed the PPACOG projections; therefore, the annual growth rate of 1.16 percent should be conservative. It should be noted that all known development traffic studies have been included in this study and this includes the Kimley-Horn traffic studies of Meadowbrook Park, Crossroads Mixed Use, and Reagan Ranch completed in the immediate area in the last five years. Background traffic volumes for 2026 and 2040 are shown in **Figures 6** and **7**, respectively.

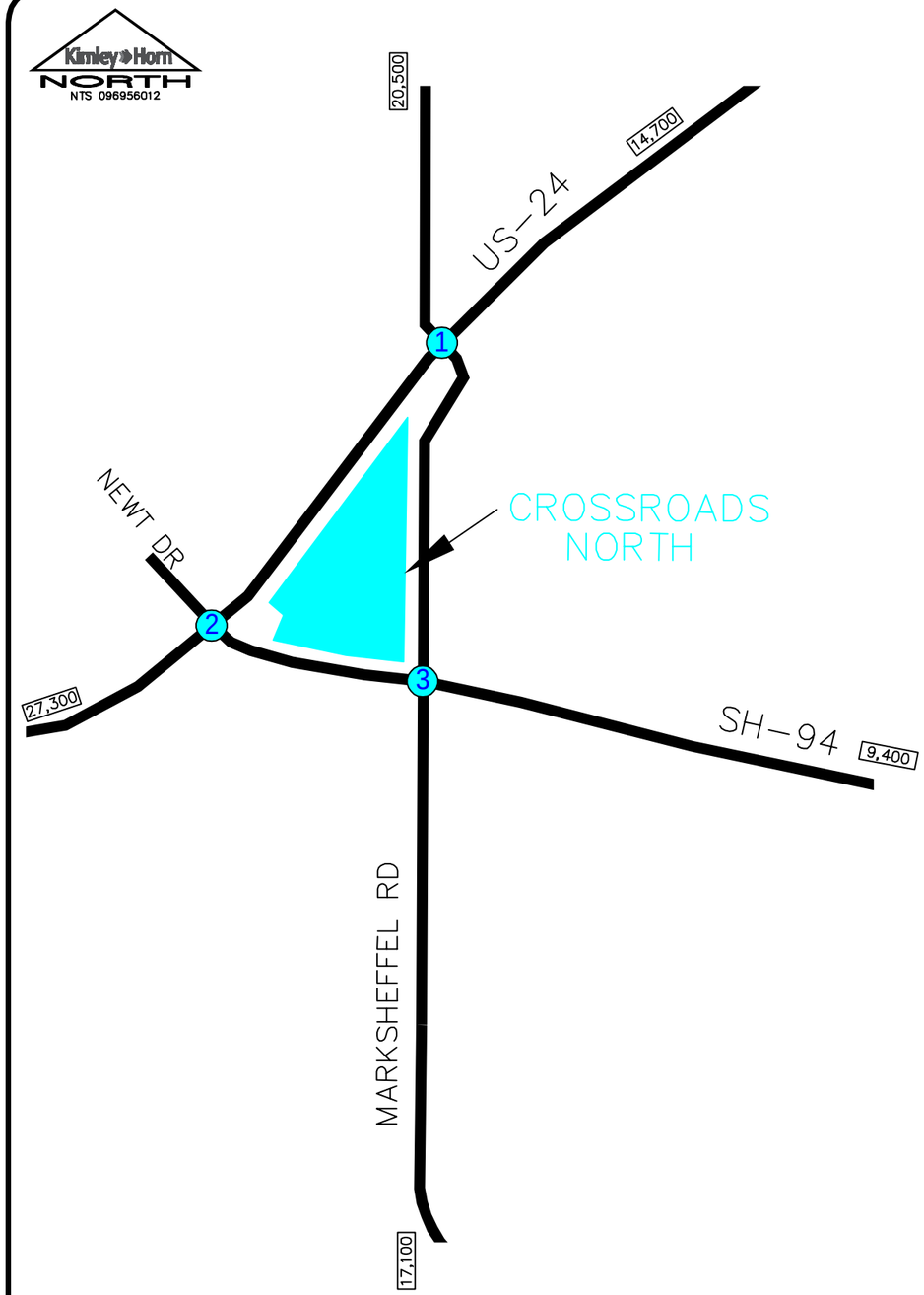


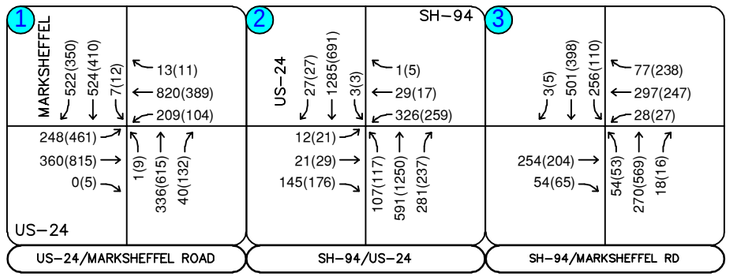




CROSSROADS NORTH
COLORADO SPRINGS, CO
EXISTING LANE CONFIGURATIONS AND CONTROL

FIGURE 3



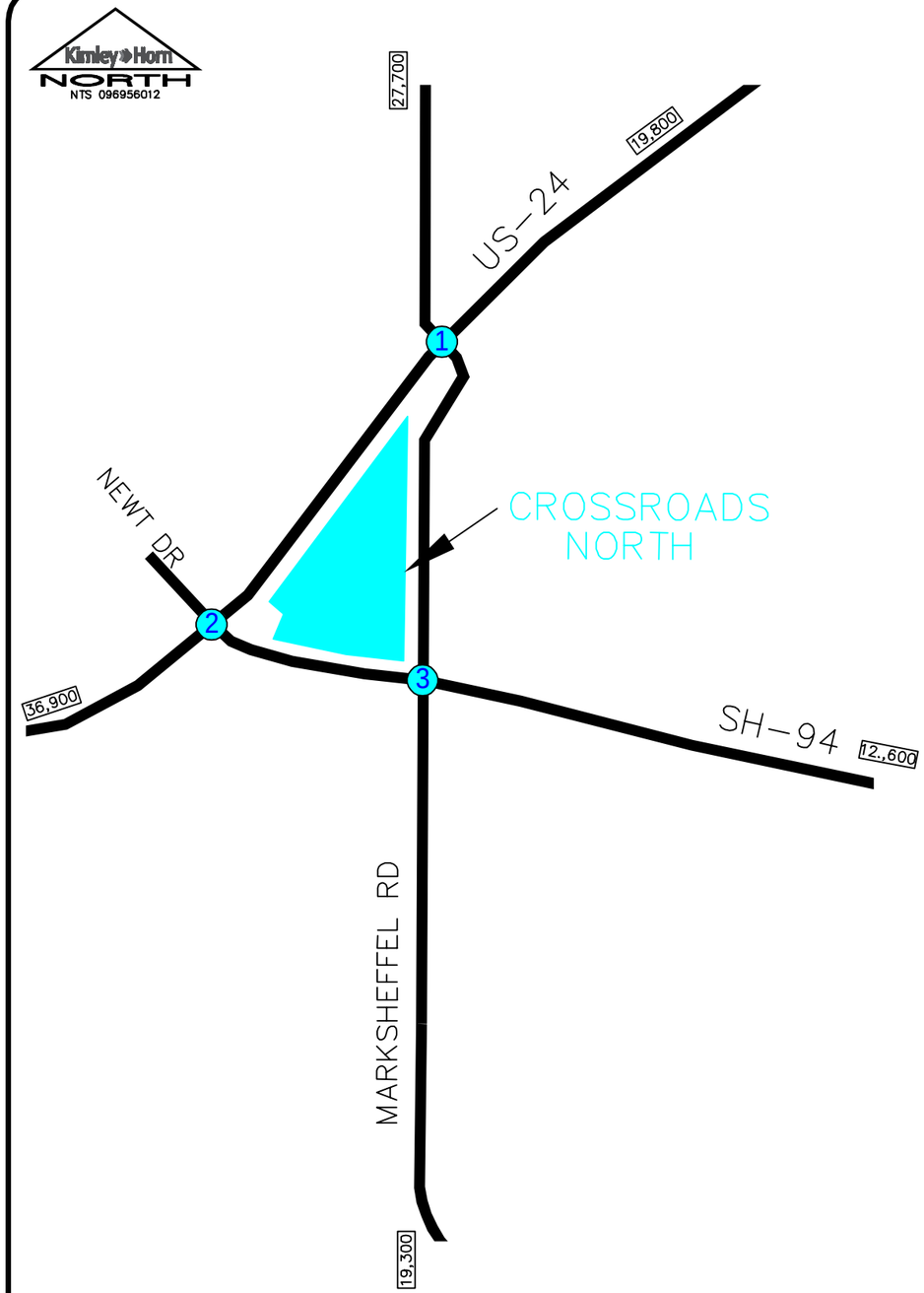


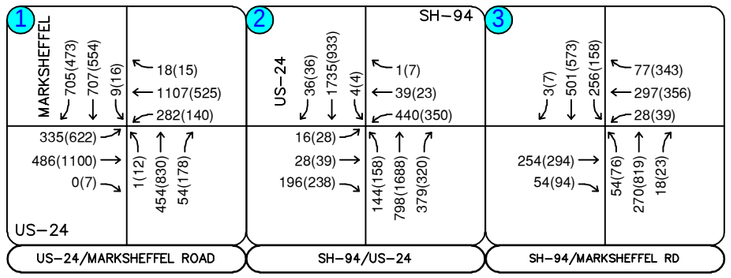
LEGEND

X	Existing Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2020 EXISTING TRAFFIC VOLUMES

FIGURE 4



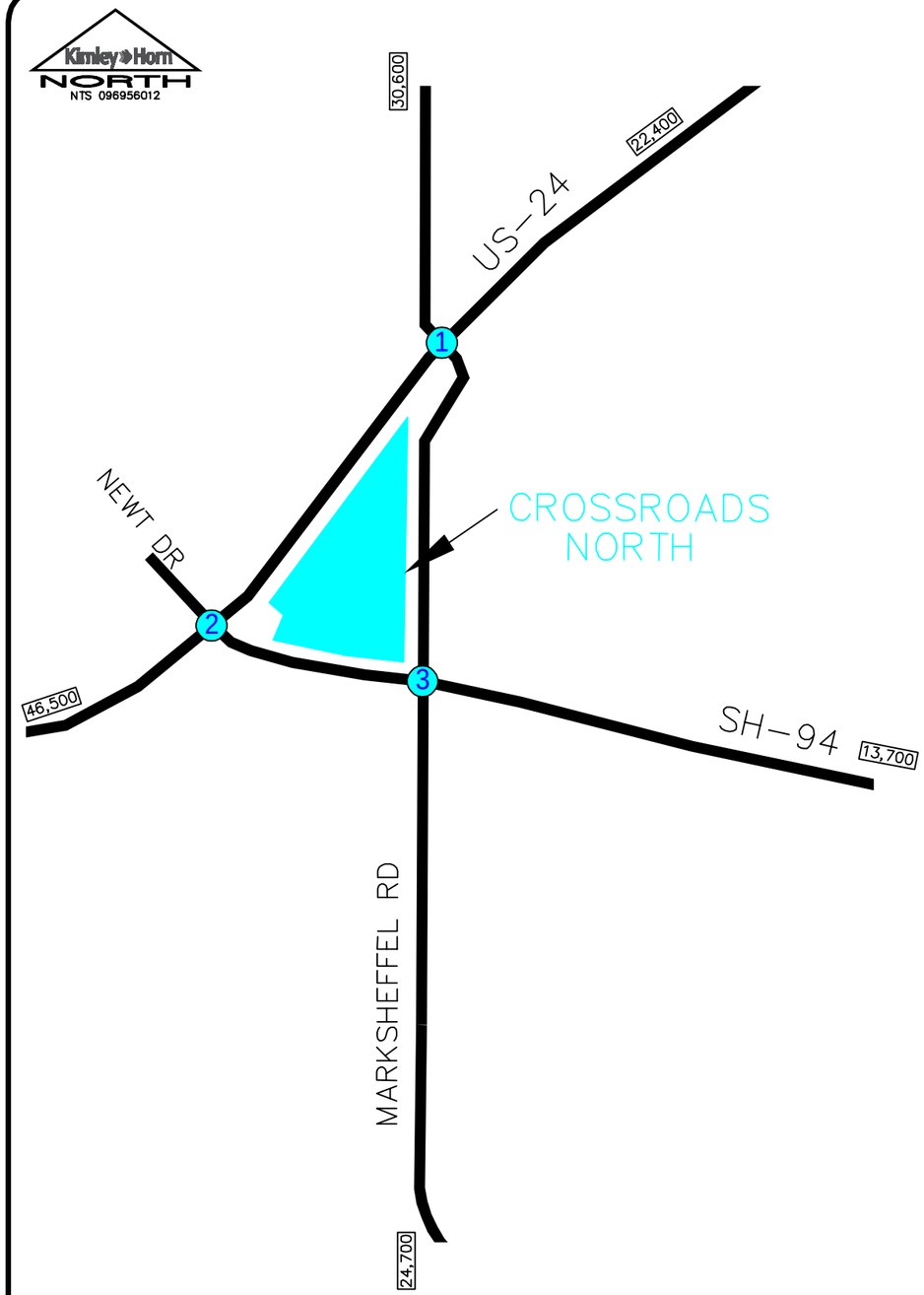


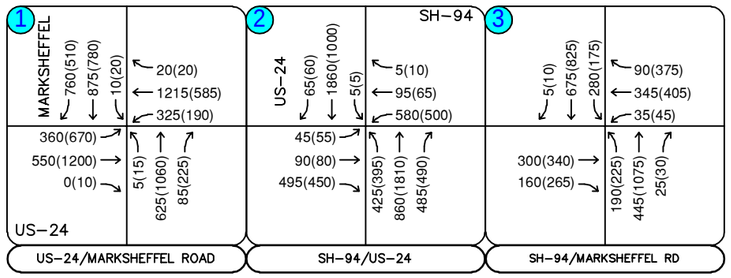
LEGEND

X	Existing Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2020 ADJUSTED EXISTING TRAFFIC VOLUMES

FIGURE 5



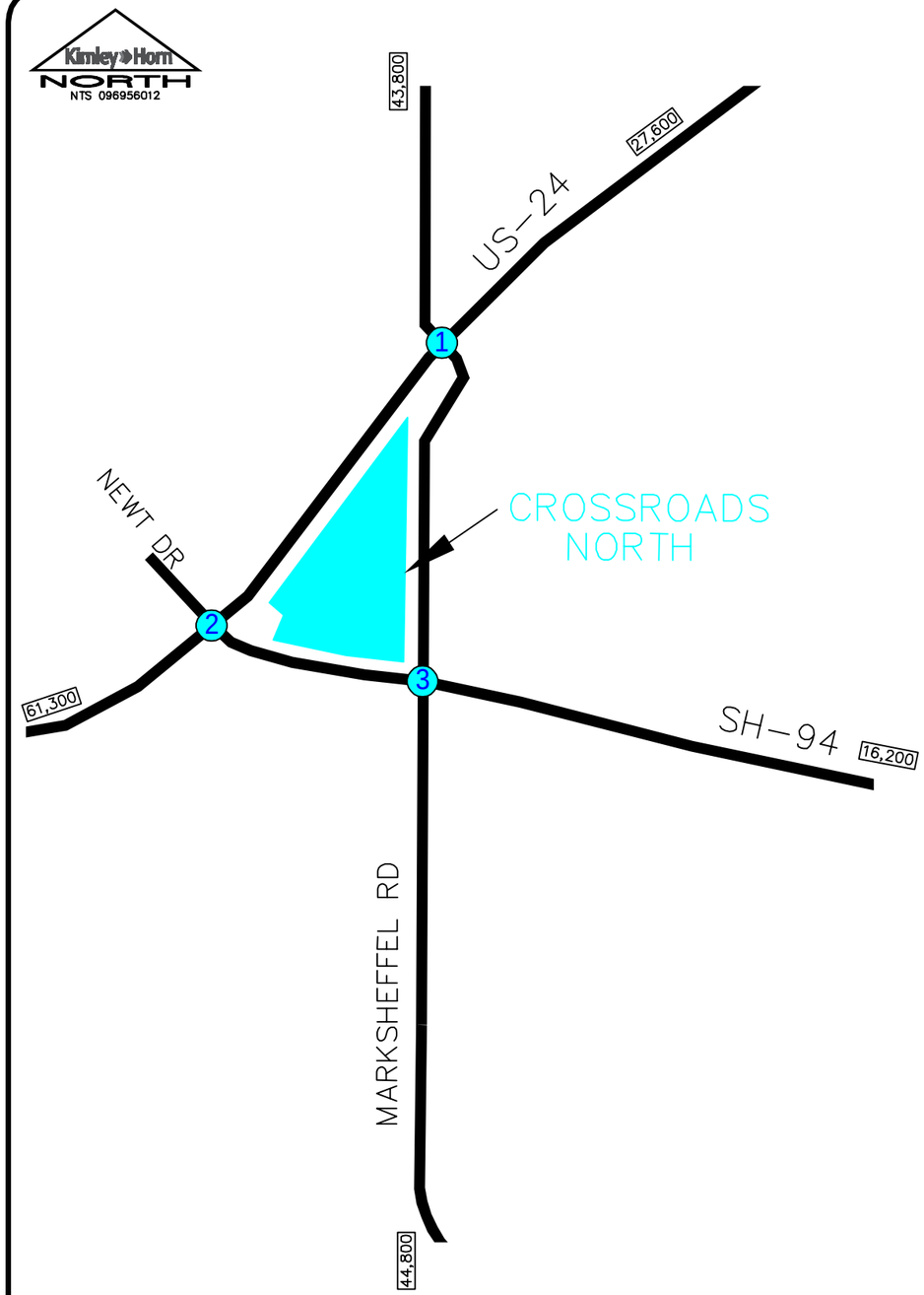


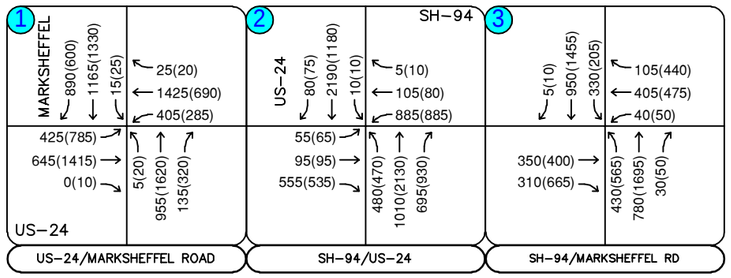
LEGEND

X	Existing Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2026 BACKGROUND TRAFFIC VOLUMES

FIGURE 6





LEGEND

X	Existing Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2040 BACKGROUND TRAFFIC VOLUMES

FIGURE 7

4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses.

As mentioned previously, the project was evaluated with a 2026 horizon and a full buildout 2040 horizon. For this study, Kimley-Horn used the ITE Trip Generation Manual average rates and fitted curve equations that apply to Public Park (ITE 411), Movie Theater (ITE 444), Tire Superstore (ITE 849), Home Improvement Superstore (ITE 862), Furniture Store (ITE 890), Sit-Down Restaurant (ITE 932), Fast-Food Restaurant with Drive Through (ITE 934), and Gasoline Station with Convenience Market (ITE 960) for traffic associated with the development area of the project.

Since the project is proposed to contain a mix of uses, internal capture trips are expected to occur on site as well. These internal capture trips are shared trips from vehicles already within the internal street network. These shared trips reduce the number of total external trips and were calculated directly per the ITE procedure but were capped based on thresholds set forth by CDOT. Based on the CDOT access code, internal trip reductions cannot not exceed two percent for the AM peak or eight percent for PM peaks unless clearly justified and documented by actual studies. As such, an internal capture rate of two (2) percent was used during the morning peak hour and a rate of eight (8) percent during the afternoon peak. Phase 1 development of the project in 2026 is expected to generate approximately 11,246 daily weekday external vehicle trips with 927 of these trips occurring during the morning peak hour and 899 trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 10th Edition – Volume 1: User's Guide and Handbook*, 2017. **Table 1** provides

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Tenth Edition, Washington DC, 2017.

the estimated trip generation for Phase 1 of the project. The trip generation calculations are included in **Appendix C.**

Table 1 – Phase 1 Project Traffic Generation

Use	Quantity	Daily	Weekday Vehicle Trips					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Crossroads North								
Public Park (ITE 411)	20 Acres	16	0	0	0	1	1	2
Tire Superstore (ITE 849)	7,000 SF	144	6	3	9	7	8	15
Home Improvement Superstore (ITE 862)	127,000 SF	3,904	113	86	199	145	151	296
Furniture Store (ITE 890)	114,000 SF	720	21	9	30	28	31	59
Sit Down Restaurant (ITE 932)	11,000 SF	1,234	60	49	109	66	41	107
Fast-Food Restaurant (ITE 934)	2,500 SF	1,178	51	49	100	43	39	82
Gas Station Super Convenience (ITE 960)	6,000 SF	5,026	249	250	499	208	208	416
Total Crossroads North Trips		12,222	500	446	946	498	479	977
Crossroads North Trips after Internal Capture		**11,246**	**490**	**437**	**927**	**458**	**441**	**899**

With full project buildout by 2040, the development area is expected to generate approximately 16,066 daily weekday external vehicle trips with 1,037 of these trips occurring during the morning peak hour and 1,269 trips occurring during the afternoon peak hour. **Table 2** provides the estimated trip generation for full buildout of the project.

Table 2 – Full Buildout Project Traffic Generation

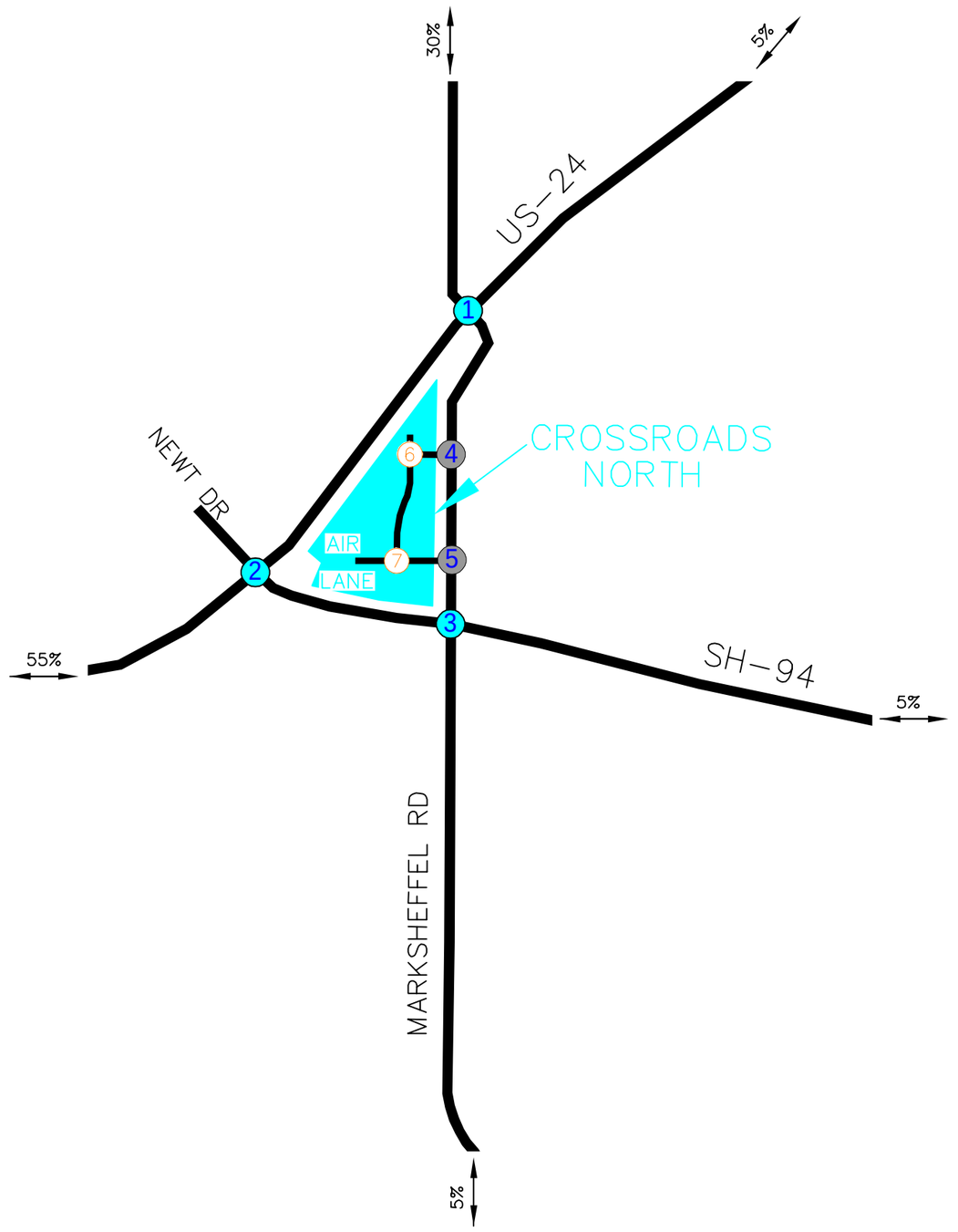
Use	Quantity	Daily	Weekday Vehicle Trips					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Crossroads North								
Public Park (ITE 411)	20 Acres	16	0	0	0	1	1	2
Movie Theatre (ITE 444)	52,000 SF	4,062	5	6	11	302	19	321
Tire Superstore (ITE 849)	7,000 SF	144	6	3	9	7	8	15
Home Improvement Superstore (ITE 862)	127,000 SF	3,904	113	86	199	145	151	296
Furniture Store (ITE 890)	114,000 SF	720	21	9	30	28	31	59
Sit Down Restaurant (ITE 932)	11,000 SF	1,234	60	49	109	66	41	107
Fast-Food Restaurant (ITE 934)	5,000 SF	2,356	103	98	201	85	78	163
Gas Station Super Convenience (ITE 960)	6,000 SF	5,026	249	250	499	208	208	416
Total Crossroads North Trips		17,462	557	501	1,058	842	537	1,379
Crossroads North Trips after Internal Capture		**16,066**	**546**	**491**	**1,037**	**775**	**494**	**1,269**

4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, expected roadway improvements, and the proposed access system for the project. Assignment of project traffic was based upon the trip generation described previously and the distributions developed for the project area. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The project trip distribution is illustrated in **Figure 8.**

4.3 Traffic Assignment and Total (Background Plus Project) Traffic

Traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1** and **Table 2**. Phase 1 project traffic assignment for the development area is shown in **Figure 9** while full buildout traffic assignment is shown in **Figure 10**. Project traffic volumes were added to the background volumes to represent estimated traffic conditions for the short term 2026 horizon and long term 2040 horizon. These background plus project (total) traffic volumes for the project are illustrated for the 2026 and 2040 horizon years in **Figures 11** and **12**, respectively.



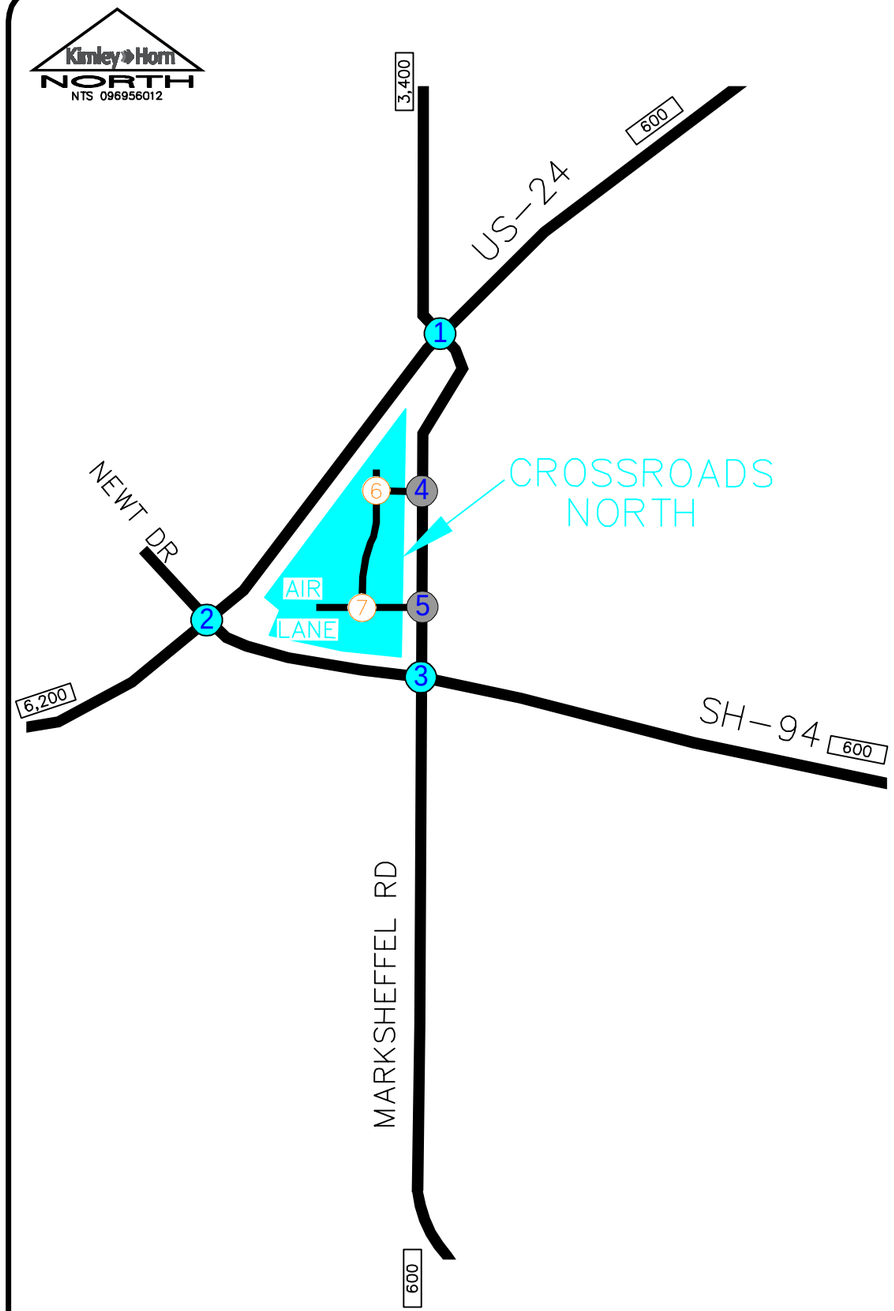
NTS 096956012

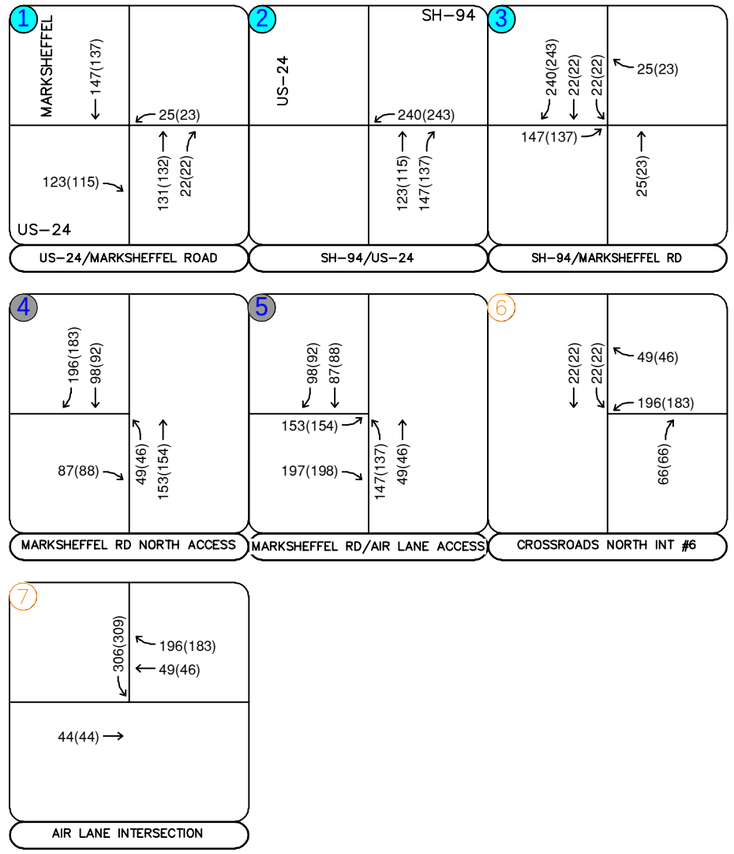
LEGEND

- Existing Key Intersection
- Proposed Access Intersection
- Proposed Internal Intersection
- XX% External Trip Distribution

CROSSROADS NORTH
COLORADO SPRINGS, CO
PROJECT TRIP DISTRIBUTION

FIGURE 8





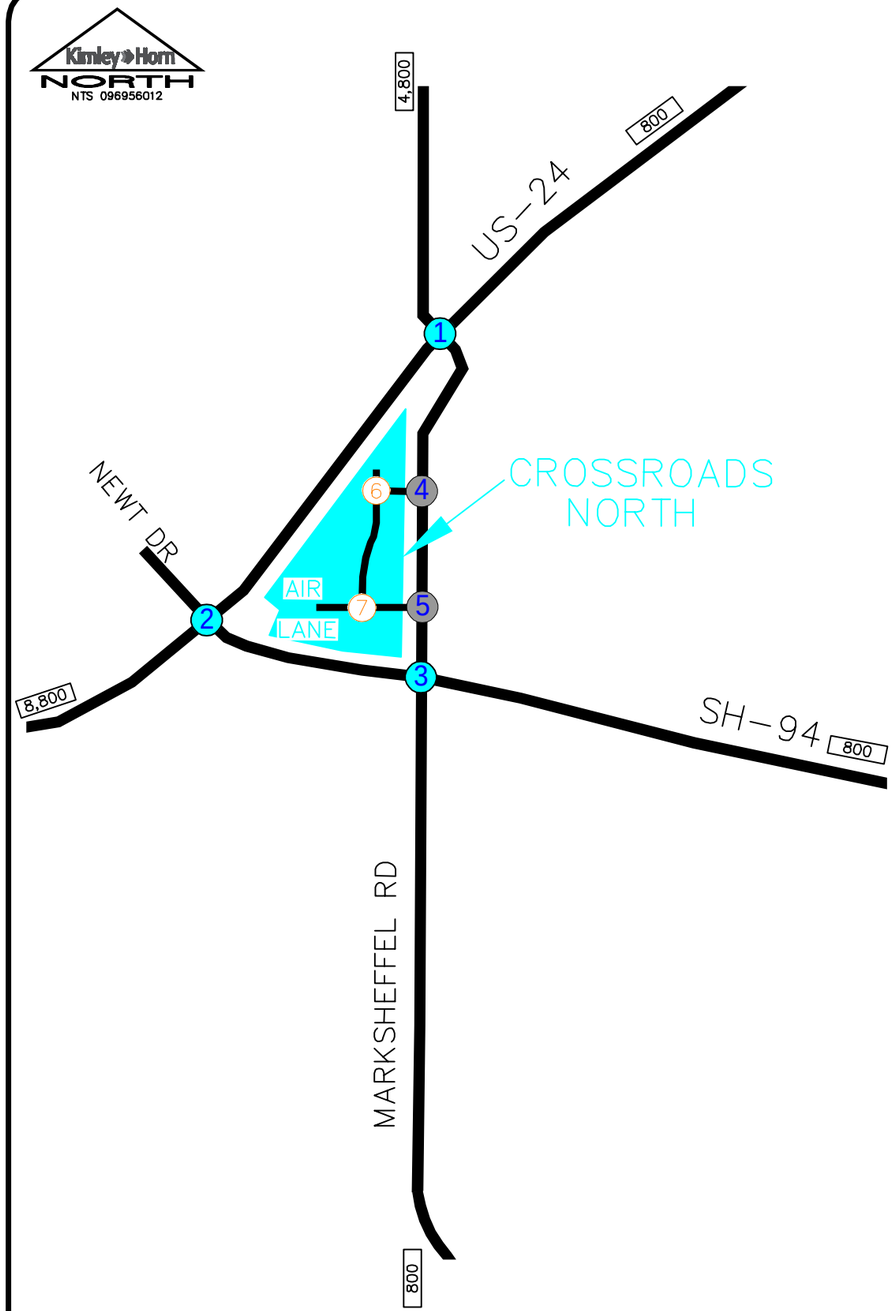
LEGEND

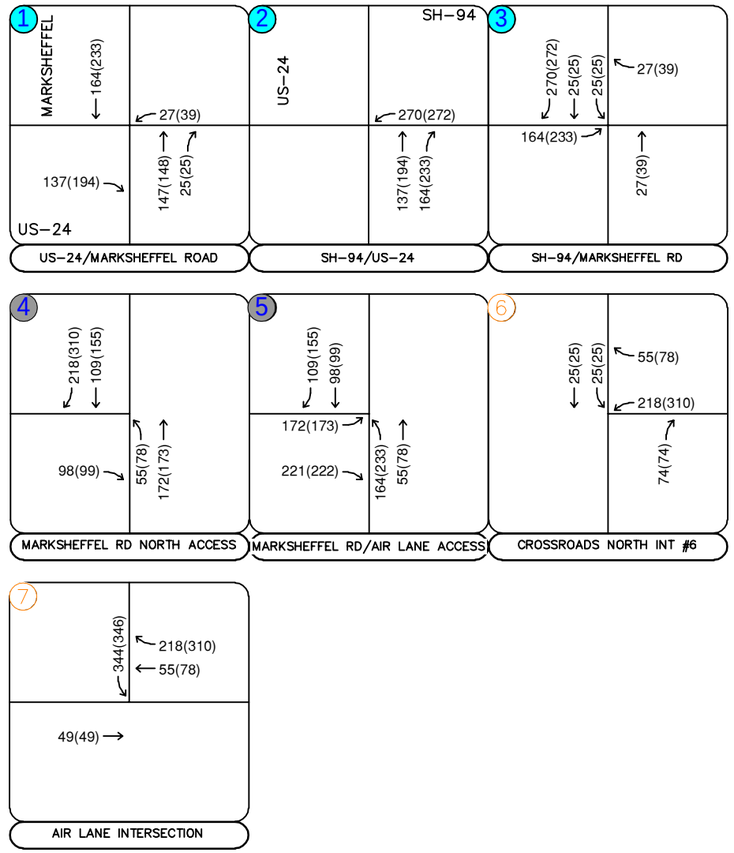
- (X) Existing Key Intersection
- (X) Proposed Access Intersection
- (X) Proposed Internal Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

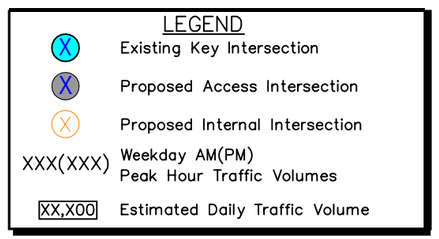
CROSSROADS NORTH
COLORADO SPRINGS, CO
2026 PROJECT TRAFFIC ASSIGNMENT

FIGURE 9

Kimley»Horn

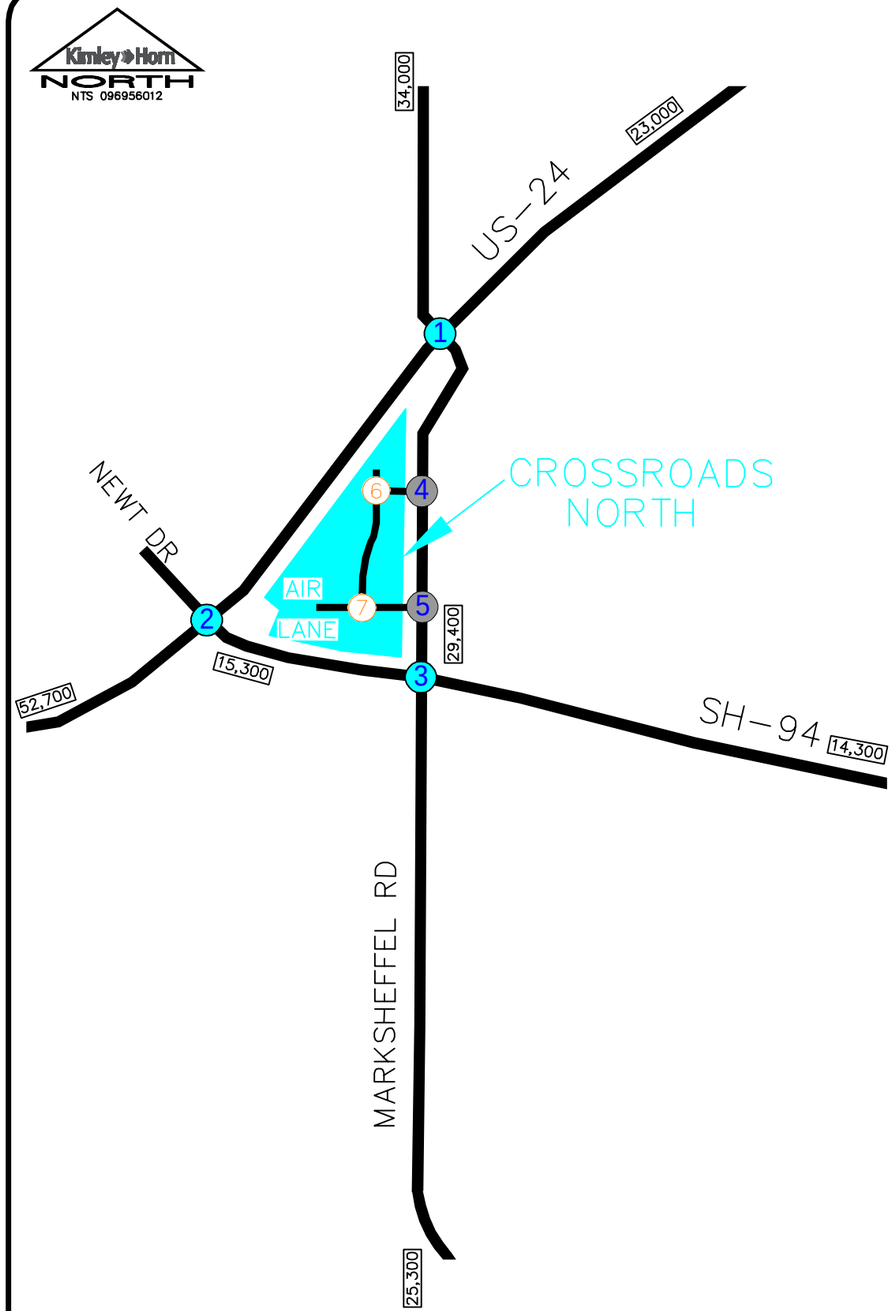


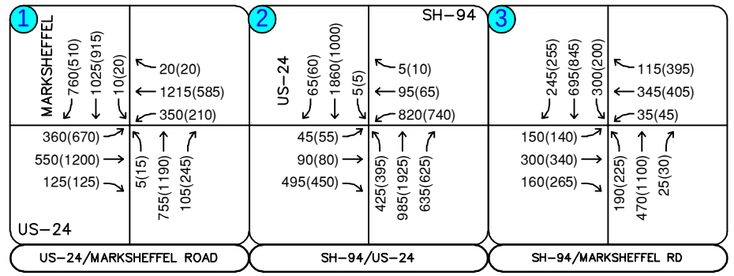


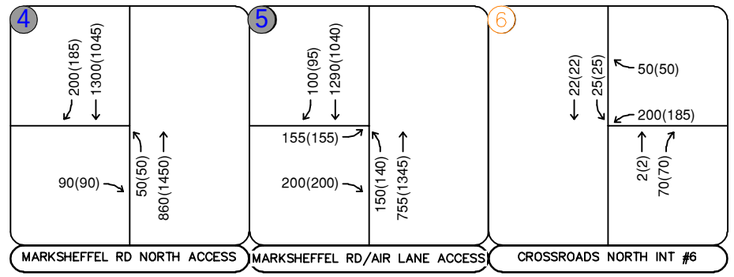


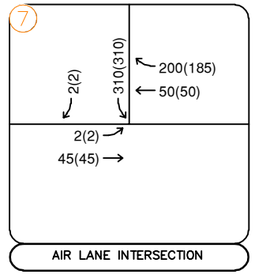
CROSSROADS NORTH
COLORADO SPRINGS, CO
2040 PROJECT TRAFFIC ASSIGNMENT

FIGURE 10









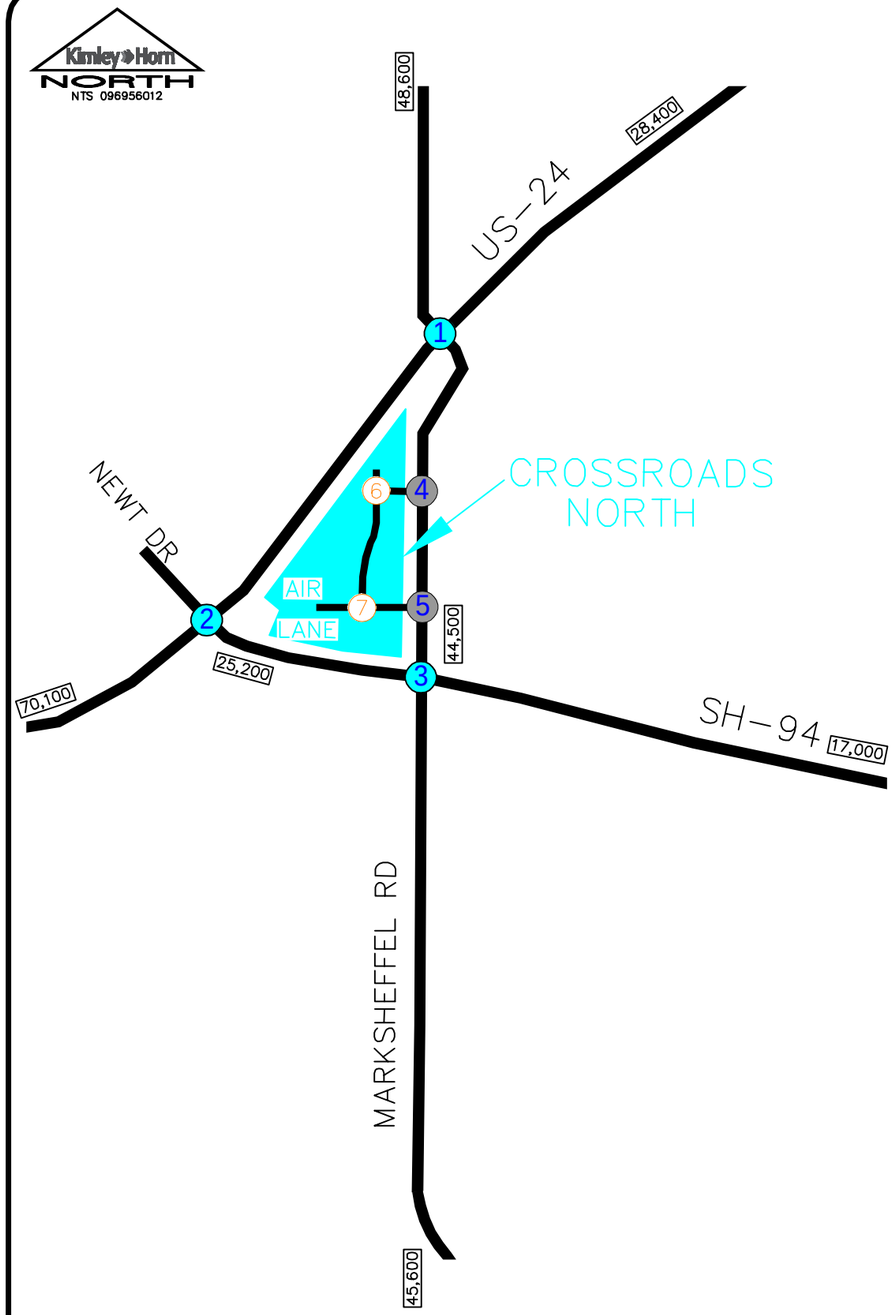
LEGEND

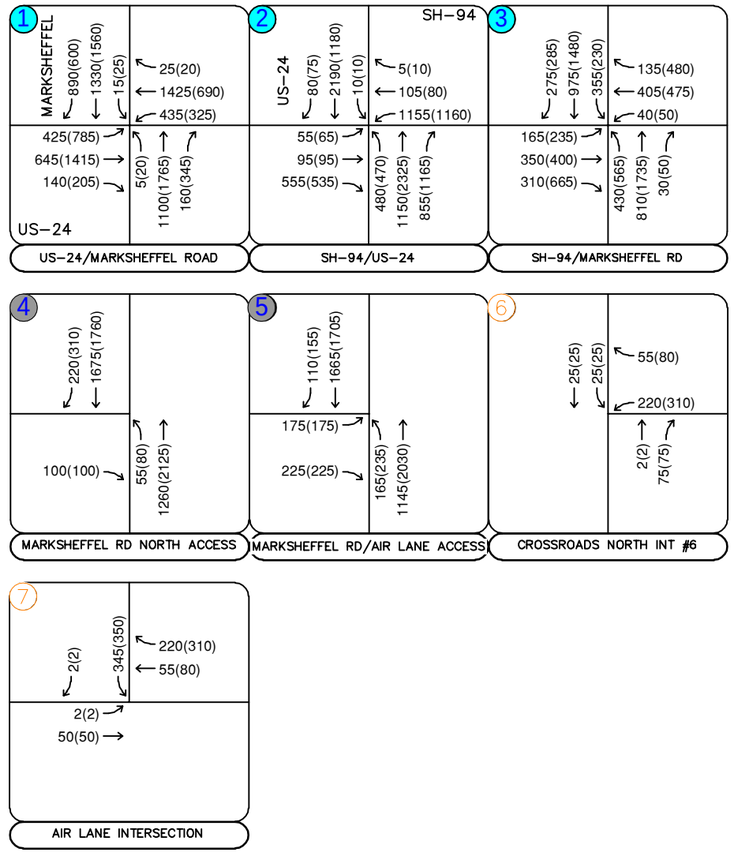
- (X) Existing Key Intersection
- (X) Proposed Access Intersection
- (X) Proposed Internal Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- [XX,X00] Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2026 TOTAL TRAFFIC VOLUMES

FIGURE 11

Kimley»Horn





LEGEND

- (X) Existing Key Intersection
- (X) Proposed Access Intersection
- (X) Proposed Internal Intersection
- XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

CROSSROADS NORTH
COLORADO SPRINGS, CO
2040 TOTAL TRAFFIC VOLUMES

FIGURE 12

5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2026 and 2040 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, standard traffic engineering practice recommends overall intersection LOS D and movement/approach LOS E as the minimum desirable thresholds for acceptable operations. **Table 3** shows the definition of level of service for signalized and unsignalized intersections.

Table 3 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Control Delay (sec/veh)	Unsignalized Intersection Average Total Control Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Study area intersections were analyzed based on average total control delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the level of service (LOS) for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. Level of service for a two-way stop-controlled intersection is not defined for the intersection as a whole. Level of service for a signalized and four-way stop controlled intersection is defined for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

5.2 Key Intersection Operational Analysis

Calculations for the level of service at the key intersections identified for study are provided in **Appendix D**. The existing and background traffic analyses are based on the lane geometry and intersection control shown in **Figure 3**. The signalized intersection analysis utilizes the cycle lengths with existing phasing and timing provided by CDOT. These signal timing sheets are included in **Appendix E**. Existing peak hour factors were used for all horizons while the recommended HCM urban area peak hour factor of 0.92 was used for the project accesses. Synchro traffic analysis software was used to analyze the study area intersections and access drives for level of service. The Synchro Highway Capacity Manual (HCM) methodology reports were used to analyze intersection control delay and level of service.

US-24 and Marksheffel Road (#1)

US-24 and Marksheffel Road (#1) is a four-leg signalized intersection. This intersection currently operates with a LOS D during the morning and afternoon peak hours under the existing lane configuration and signal control. With the existing lane configurations and control, this intersection is expected to continue to operate acceptably with LOS E during both peak hours in the 2026 total condition. Therefore, it is recommended that the signal at this intersection be optimized by 2026. With signal optimization, this intersection is anticipated to operate acceptably during the 2026 horizon with project traffic.

By 2040, it is anticipated that the intersection will operate with long delays during the peak hours without the addition of project traffic. To improve operations at this intersection, both US-24 and Marksheffel Road may need to provide three through lanes on all approaches. With these improvements, the intersection is anticipated to operate at LOS D during the peak hours in 2040. **Table 4** provides the results of the level of service at this intersection.

Table 4 – US-24 and Marksheffel Road (#1) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Control Delay (sec/veh)	LOS	Control Delay (sec/veh)	LOS
2020 Adjusted Existing	47.8	D	48.5	D
2026 Background	54.9	D	57.5	E
2026 Background Plus Project	67.6	E	68.3	E
2026 Background Plus Project #	54.9	D	54.9	D
2040 Background	98.1	F	149.5	F
2040 Background Plus Project ##	54.1	D	54.8	D

= Optimized signal timings
= # + Three through lanes on all approaches

SH-94/Newt Drive and US-24 (#2)

SH-94/Newt Drive and US-24 (#2) is a four-leg signalized intersection. Although both highways are east-west, the traffic software at this intersection assigned US-24 as north-south based on cardinal direction of existing roadway alignments. This intersection currently operates with LOS D or better during the morning and afternoon peak hours under the existing lane configuration and signal control. With or without the completion of the development in 2026, the intersection is anticipated to operate with LOS F during the morning peak hour. If future project volumes are realized, it is recommended that an additional through lane be considered as a regional improvement on the US-24 approaches. The US-24 right turn to eastbound SH-94 is recommended to include a separate right turn lane operating with free movements. Acceleration lanes currently exist in both directions along US-24 from both Newt Drive and SH-94. For southwestbound US-24 at SH-94 (#2), the existing acceleration lane along US-24 will need to be reconstructed with 960 feet of length plus a 225-foot taper if and when US-24 is improved to provide three through lanes along northbound US-24. For northeastbound US-24 at SH-94, it is recommended that this acceleration lane be converted to the third northbound through lane as the acceleration lane is not warranted. Further, the northeastbound US-24 third through lane needs to continue for 1,200 feet plus provide a 660-foot taper based on MUTCD standards. Also, it is recommended that triple westbound left turns be designated by converting the inside westbound through lane to a left turn lane. It is believed that with these improvements, the intersection is at its ultimate at-grade configuration. With the ultimate configuration the intersection improves significantly and operates acceptably in 2026, but long delays may still occur during the peak hours in 2040. As such, and as requested by CDOT, an additional analysis was performed with an interchange grade separation including a westbound left turn flyover ramp condition. With this westbound left turn flyover ramp and the existing two through lanes in each direction along US-24, this intersection is expected to operate acceptably with LOS C or better during the peak hours in 2026 and LOS E or better during the peak hours in 2040. With three through lanes in each direction along US-24 and the implementation of the westbound let turn flyover ramp, this intersection is expected to operate acceptably during the peak hours in 2040. **Table 5** provides the results of the level of service at this intersection.

Table 5 – SH-94/Newt Drive and US-24 (#2) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Control Delay (sec/veh)	LOS	Control Delay (sec/veh)	LOS
2020 Adjusted Existing	35.3	D	24.9	C
2026 Background	130.4	F	46.7	D
2026 Background Plus Project	159.4	F	78.9	E
2026 Background Plus Project #	45.4	D	33.4	C
2026 Background Plus Project ## (WBL Flyover)	25.9	C	14.4	B
2040 Background #	60.3	E	44.5	D
2040 Background Plus Project #	95.4	F	82.5	F
2040 Background Plus Project ## (WBL Flyover)	55.4	E	23.0	C
2040 Background Plus Project ### (WBL Flyover)	25.3	C	32.0	C

= Three northbound and southbound through lanes, dual northbound left turn lanes, triple westbound left turn lanes.
= Dual northbound left turn lanes and westbound left flyover ramp
= Three northbound and southbound through lanes, dual northbound left turn lanes and westbound left flyover ramp

SH-94 and Marksheffel Road (#3)

The existing intersection of SH-94 and Marksheffel Road (#3) is currently a four-leg signalized intersection. This intersection currently operates with LOS D or better during the morning and afternoon peaks hours with existing traffic volumes and lane configurations. With the completion of development in 2026, the northbound and southbound right turns at this intersection are anticipated to be a free southbound right turn due to CDOT State Highway Access Code guidelines. By completion of development in 2026, this intersection is expected to continue to operate acceptably during the peak hours with existing lane configurations and control.

By 2040, the following improvements are recommended: optimized signal timings, eastbound and westbound right turn movements to implement permissive/overlap phasing, two eastbound and westbound through lanes, and three northbound and southbound through lanes. With these improvements, this intersection is anticipated to operate acceptable with LOS D or better during the peak hours in 2040. **Table 6** provides the results of the level of service at this intersection.

Table 6 – SH-94 and Marksheffel Road (#3) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Control Delay (sec/veh)	LOS	Control Delay (sec/veh)	LOS
2020 Adjusted Existing	32.1	C	43.2	D
2026 Background	30.7	C	45.5	D
2026 Background Plus Project #	36.5	D	47.8	D
2040 Background	63.6	E	203.7	F
2040 Background Plus Project ##	31.5	C	46.7	D

= NB to EB right turn acceleration lane, and SB to WB right turn acceleration lane
= Optimized signal timings, two eastbound and westbound through lanes, three northbound and southbound through lanes, NB to EB right turn acceleration lane, and SB to WB right turn acceleration lane

5.3 Project Access Operational Analysis

Direct access to Crossroads North is proposed from the northern three-quarter access (#4) and the southern full movement access (#5) along Marksheffel Road located approximately 2,000 feet and 1,000 feet north of SH-94, respectively. The south access is currently proposed to be named Air Lane which will provide east-west collector roadway connectivity to Crossroads North. A sensitivity analysis has been prepared later in Section 5.8 comparing the north access along Marksheffel Road as a full movement signalized intersection and a three-quarter movement unsignalized intersection.

Based on Colorado Springs standards, a right turn lane is required for any access with a projected peak hour right ingress turning volume of 25 vehicles per hour or greater for principal arterials, therefore it is recommended that a southbound right turn lane be constructed at both intersections due to the volumes being 200 vehicles per hour at the north access and 100 vehicles per hour at the south access in 2026. Northbound left turn lanes will also be required at both of these accesses (#4 and #5) along Marksheffel Road. Based on Colorado Springs standards, the northbound left turn at the Marksheffel Road North Access (#4) should provide a turn lane length of 295 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper. Additionally, an R1-1 “STOP” sign should be installed on the exiting eastbound approach of the Marksheffel Road North Access (#4). To meet Colorado Springs standards, the northbound left turn at the Marksheffel Road South Access (#5) should provide a turn lane length of 390 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper.

An internal street evaluation was conducted for the Crossroads North development area. The south access to Crossroads North along Marksheffel Road is proposed to be named Air Lane and is expected to be classified as an El Paso County Urban Non-Residential Collector roadway with a 60-foot right-of-way (ROW). Air Lane extends east/west and is proposed to connect with a north/south extending Non-Residential Collector Street (#7). Intersection #7 (collector to collector) is proposed to be located approximately 525 feet west of Marksheffel Road. The north/south extending Non-Residential Collector Street also connects with an east/west collector street (#6) that extends from the north access to Marksheffel Road. The north access street connecting with Marksheffel Road is proposed to be classified as an El Paso County Urban Non-Residential

Collector roadway. To meet El Paso County standards for a design speed of 35 mph, the recommended left-turn lanes and right turn lanes internal to Crossroads North should provide 135 feet of deceleration length plus 140-foot tapers while all left turn lanes and right turn lanes that require a stop will also provide a storage length (determined from ECM Table 2-30 for each location).

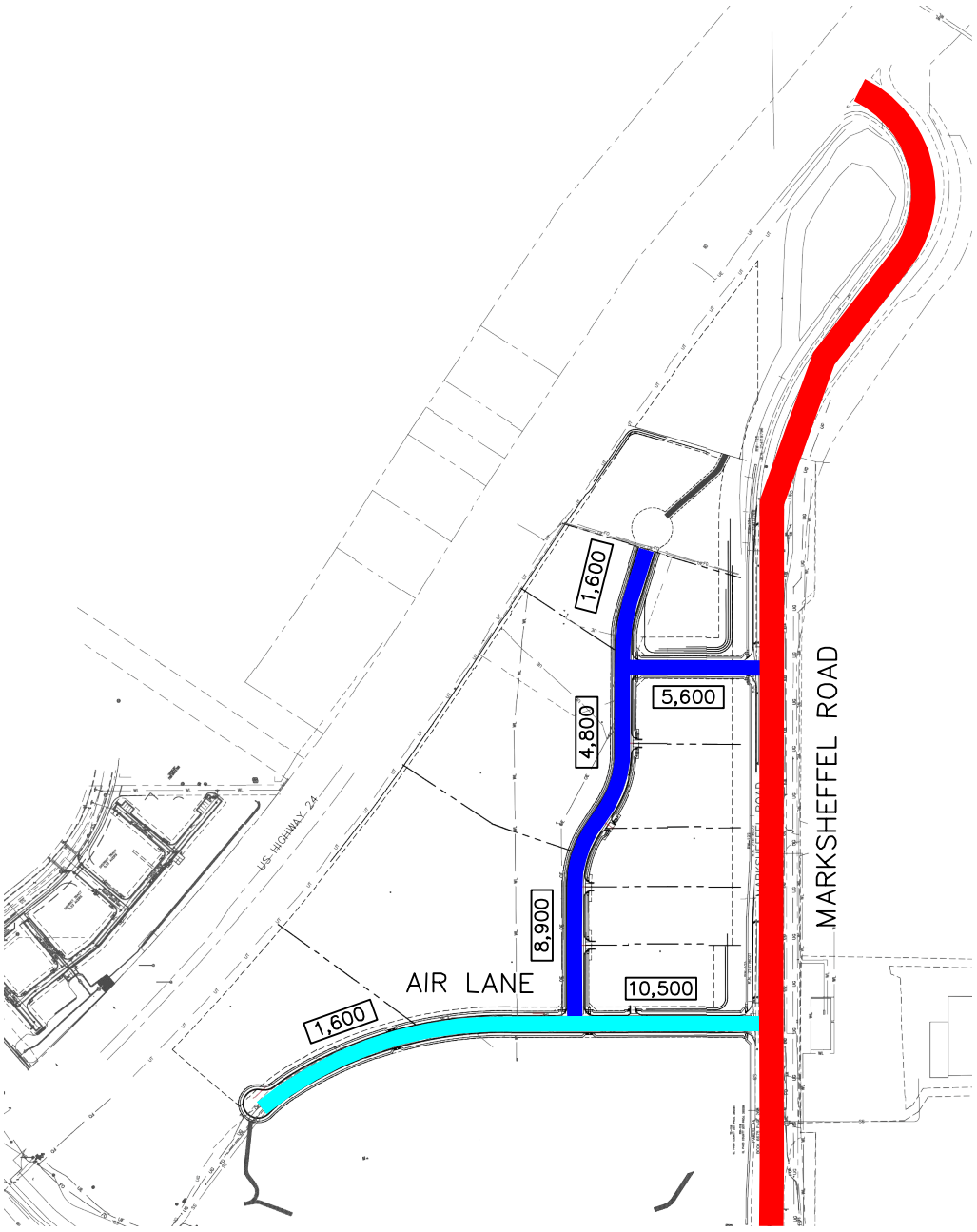
The eastbound left turn movement at the proposed Marksheffel Road South Access (#5) is expected to operate with LOS F during the peak hours in 2026 under stop control. As such, a signal warrant evaluation was performed, and warrants are expected to be met at this access based on 2026 traffic volume projections. The signal warrant analysis is attached in **Appendix E**. With signal control, the Marksheffel Road South Access (#5) intersection is expected to operate acceptably with LOS A during the peak hours throughout the 2040 horizon.

With the recommended lane configurations and control, all movements at the two internal intersections (#6 and #7) to Crossroads North are expected to operate acceptably with LOS B or better during the peak hours throughout the 2040 horizon. **Figure 13** illustrates the street classification map for roadways internal to Crossroads North. The operational analysis at the proposed project driveways as well as the internal intersections to Crossroads North is summarized in **Table 7** for development in 2026 and for the long-term 2040 horizon. Detailed results of the operational analysis are also provided in **Appendix D**.

Table 7 – Project Access LOS Results

Access and Movement	2026 Total Traffic				2040 Total Traffic			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Control Delay (sec/ veh)	LOS	Control Delay (sec/ veh)	LOS	Control Delay (sec/ veh)	LOS	Control Delay (sec/ veh)	LOS
Crossroads North:								
Marksheffel Road North Access (#4)								
(3/4 Movements – Unsignalized)					#	#	#	#
Northbound Left	15.6	C	12.9	B	12.3	B	14.9	B
Eastbound Right	17.8	C	14.8	B	13.9	B	14.4	B
Crossroads North:								
Marksheffel Road South Access (#5)								
Northbound Left	18.0	C	13.8	B	-	-	-	-
Eastbound Left	108.3	F	74.1	F				
Eastbound Right	26.3	D	19.2	C				
Crossroads North:					#	#	#	#
Marksheffel Rd South Access (#5 - Signal)	9.3	A	7.3	A	8.7	A	6.0	A
Crossroads North Internal Intersections:								
North Intersection (#6)								
Westbound Left	10.6	B	10.4	B	10.8	B	11.9	B
Westbound Right	8.7	A	8.7	A	8.7	A	8.8	A
Southbound Left	7.4	A	7.4	A	7.4	A	7.4	A
Crossroads North Internal Intersections:								
Air Lane Intersection (#7)								
Eastbound Left	7.8	A	7.8	A	7.9	A	8.2	A
Southbound Approach	12.0	B	12.0	B	12.7	B	13.2	B

= Three northbound and southbound through lanes



LEGEND

- URBAN 4–LANE PRINCIPAL ARTERIAL
- URBAN NON–RESIDENTIAL COLLECTOR
- MODIFIED URBAN NON–RES. COLLECTOR
- XX,X00 ESTIMATED 2040 DAILY TRAFFIC VOLUME

NOTE: EL PASO COUNTY STREET CLASSIFICATIONS

CROSSROADS NORTH
EL PASO COUNTY, CO
CROSSROADS NORTH SITE CIRCULATION

FIGURE 13

5.4 Sight Distance Evaluation

It is recommended that appropriate sight distance triangles be provided at all site access points to give drivers exiting the development area a clear view of oncoming traffic. Landscaping and objects within sight triangles must not obstruct drivers' views of the adjacent travel lanes. Intersection sight distances for left turn from stop and right turn from stop were analyzed for the proposed project accesses along Marksheffel Road.

With AASHTO standards and a design speed of 55 miles per hour along Marksheffel Road, the intersection sight distance for a vehicle turning left from stop is 610 feet, while the sight distance for a vehicle turning right from stop is 530 feet. Therefore, all obstructions for left turning vehicles from stop should be clear to the right within the triangle created with a vertex point located 14.5 feet from the edge of the major road traveled way (typical position of the minor road driver's eye when stopped) and a line-of-sight distance of 610 feet located in the middle of the nearest lane opposite of the center median for both accesses along Marksheffel Road. Likewise, all obstructions for right turning vehicles from stop should be clear to the left within the triangle created with a vertex point located 14.5 feet from the edge of the major road traveled way and a line-of-sight distance of 530 feet located in the middle of the nearest lane for all accesses along Marksheffel Road.

5.5 Bicycle and Pedestrian Access

Bicycle and pedestrian access evaluations were conducted for the Crossroads North project. This focused on the areas of Marksheffel Road, US-24, and SH-94 adjacent to the site development area. The following provides a description of the assessment.

<u>Existing Bicycle, Pedestrian, and Transit Access</u>

There are currently not any sidewalks or bicycle lanes provided along Marksheffel Road, US-24, and SH-94 within the project limits. Transit within the area is provided by Mountain Metropolitan Transit. From review of the most recent route map from August 1, 2019, there are not any transit routes that extend through the project limits.

Future Bicycle, Pedestrian, and Transit Access

Sidewalks will be provided internal to the development area along both sides of all local and collector streets and connections will be made to Marksheffel Road. Additionally, a pedestrian amenity connection will be provided to the secondary regional trail along SH-94. Sidewalk will be provided along Marksheffel Road adjacent to the project frontage; however, bicycle lanes are not proposed along Marksheffel Road or SH-94 adjacent to the project.

5.6 CDOT Turn Lane Evaluation

CDOT Access Permits will be required for the intersections of SH-94/US-24 (#2) and SH-94/Marksheffel Road (#3) in association with the project.

Since US-24 and SH-94 are state owned and maintained facilities, it is recommended that auxiliary turn lanes along US-24 and SH-94 be constructed in accordance with the current CDOT State Highway Access Code. CDOT categorizes the segments of US-24 and SH-94 through the study area as E-X: Expressway, Major Bypass. According to the State Highway Access Code for category E-X roadways, the following thresholds apply:

- A left turn deceleration lane is required for any access with a projected average daily left turn ingress volume greater than 10 with the transition taper included within the required deceleration length. If the projected peak hour left ingress turning volume is greater than 10 vehicles per hour (vph), a left turn deceleration, storage, and taper lane is required for any access.
- A right turn lane with deceleration and taper lengths is required for any access with a projected peak hour right ingress turning volume greater than 10 vph.
- A right turn lane with acceleration and taper lengths is required for any access with a project peak hour turning volume greater than 10 vph.

Based on traffic projections and the above thresholds, auxiliary turn lane requirements were calculated for the key intersections along SH-94. SH-94 provides one lane of travel in each direction and has a posted speed limit of 40 miles per hour at US-24, 55 miles per hour west of Marksheffel Road and 65 miles per hour east of Marksheffel Road. US-24 provides two lanes of travel in each direction and has a posted speed limit of 55 miles per hour through the SH-94

intersection. As such, turn lane requirements at the study area intersections along SH-94 to be impacted by project traffic are as follows:

SH-94 and US-24 (#2)

Left Turn Deceleration Lanes:

- A westbound left turn deceleration lane exists and **is** warranted today and based on projected 2026 background plus project traffic being 820 westbound left turns during the peak hour. Since SH-94 has a category of E-X the left turn lane requirement is deceleration, storage, and taper lengths. Currently there are westbound dual left-turn lanes of approximately a 475-foot length with a 525-foot taper. Based on the 40-mile per hour speed limit, the deceleration lane length is 370 feet, plus a 150-foot taper. Since triple left turn lanes are recommended here with conversion of the inside westbound through lane to a left turn lane, the storage requirement is 275 feet per lane. Therefore, it is recommended that these two left turn lanes be constructed and designated to 645 feet plus a 200-foot taper, with the outside third left turn lane being continuous. By 2040, this turn lane may need to be 760 feet plus a 200-foot taper.

- A northbound left turn deceleration lane exists and **is** warranted along US-24 approach to Newt Drive/SH-94 today and based on projected 2026 background plus project traffic being 225 left turns during the peak hour. Since US-24 has a category of E-X the left turn lane requirement is deceleration, storage, and taper lengths. Currently the northbound left-turn lane is approximately 900 feet long and the taper is approximately 150 feet. Based on the 55-mile per hour speed limit, the deceleration lane length is 600 feet, plus a 225-foot taper, and 480 feet of storage for a total length of 1,080 feet plus 225-foot taper. However, by 2026 it is recommended that dual northbound US-24 left turn lanes be designated at this intersection. Dividing the storage in half results in 850-foot plus 225-foot taper northbound dual left turn lanes.

- A southbound US-24 left turn deceleration lane exists and **is** warranted based on existing traffic volumes. However, the storage component to the left turn lane is not required based on projected 2026 background plus project traffic being 5 southbound left turns during the peak hour and the threshold being greater than 10 vph. This southbound left turn lane

along US-24 at SH-94 currently provides approximately 800 feet of length plus a 200-foot taper. Based on the 65-mile per hour speed limit along southwestbound US-24, the required deceleration length is 500 feet plus a 300-foot taper (25:1) for this left turn lane. Therefore, no improvements are needed for this lane.

Right Turn Deceleration Lanes:

- A northbound right turn deceleration lane along US-24 exists and **is** warranted today and based on projected 2026 background plus project traffic being 635 northbound right turns during the peak hour and the threshold being 10 vph. Since US-24 has a category of E-X the right turn lane requirement is deceleration and taper lengths. The northbound right turn lane is currently 600 feet with a 225-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length is 600 feet plus a 225-foot taper. Therefore, the existing northbound right turn lane meets current CDOT requirements.

- A southbound US-24 right turn deceleration lane exists and **is** warranted today and based on projected 2026 background plus project traffic being 65 southbound right turns during the peak hour and the threshold being 10 vph. Since US-24 has a category of E-X the right turn lane requirement is deceleration, and taper lengths. The southbound right turn lane is currently 800 feet long with a 200-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length is 600 feet plus a 225-foot taper. Therefore, the existing southbound right turn lane meets current CDOT requirements.

- A westbound right turn deceleration lane exists but **is not** warranted based on projected 2026 background plus project traffic being 10 westbound right turns during the peak hour and the threshold being greater than 10 vph. Since US-24 has a category of E-X the right turn lane requirement is deceleration, and taper lengths. The westbound right turn lane is currently 475 feet long with a 750-foot taper. Based on the 40-mile per hour speed limit, the deceleration lane length is 370 feet, plus a 150-foot taper. Therefore, the existing westbound right turn lane meets current CDOT requirements.

Acceleration Lanes:

- An eastbound acceleration lane along SH-94 from the US-24 northbound right turn exists and **is** warranted today and based on projected 2026 background plus project traffic being 635 northbound right turns during the peak hour and the threshold being 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is acceleration and taper length. Currently the eastbound acceleration lane is approximately 425 feet long with a 175-foot taper. Based on the 40-mile per hour speed limit, the acceleration lane length requirement is 380 feet plus a 145-foot taper. Therefore, no improvements are needed for this lane.

- A southwestbound right turn acceleration lane along US-24 from the Newt Drive right turn exists and **is** warranted today and based on projected 2026 background plus project traffic being 495 eastbound right turns during the peak hour and the threshold being 10 vph. Since US-24 has a category of E-X and a speed limit of 55 mph the right turn lane requirement is acceleration, and taper lengths. Based on the 55-mile per hour speed limit, the acceleration lane length requirement is 960 feet plus a 225-foot taper. This acceleration lane exists today for a length of 760 feet plus 225-foot taper; therefore, this lane should be extended from 760 feet to 960 feet.

- A northeastbound acceleration lane along US-24 from the SH-94 westbound right turn exists but **is not** warranted based on projected 2026 background plus project traffic being 10 westbound right turns during the peak hour and the threshold being greater than 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is acceleration and taper length. Currently the eastbound acceleration lane is approximately 1,425 feet long with a 300-foot taper. Based on the 55-mile per hour speed limit, the acceleration lane length requirement is 960 feet plus a 225-foot taper. Therefore, no improvements are needed for this lane. However, if and when a third northbound through lane is provided along US-24 at SH-94, it is recommended that this acceleration lane be converted to the third northbound through lane as the acceleration lane is not warranted.

SH-94 and Marksheffel Road (#3)

Left Turn Deceleration Lanes:

- An eastbound left turn deceleration lane exists and **is** warranted based on projected 2026 background plus project traffic being 150 eastbound left turns during the peak hour. Since SH-94 has a category of E-X the left turn lane requirement is deceleration, storage, and taper lengths. Currently the eastbound left-turn lanes are approximately 300 feet long with a 100-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length is 600 feet, plus a 225-foot taper. The storage requirement is 150 feet in 2026 and 235 feet in 2040 based on the projected left turning volume. Therefore, it is recommended that this left turn lane be constructed and designated to 750 feet plus a 225-foot taper in 2026 and 835 feet plus a 225-foot taper in 2040.

- A westbound left turn deceleration lane exists and **is** warranted today and based on projected 2026 background plus project traffic being 45 westbound left turns during the peak hour. Since SH-94 has a category of E-X the left turn lane requirement is deceleration, storage, and taper lengths. Currently the westbound left-turn lanes are approximately 225 feet long with a 200-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length is 600 feet, plus a 225-foot taper. The storage requirement is 50 feet based on the projected left turning volume. Therefore, it is recommended that this lane be constructed to 650 feet with a 225-foot taper.

Right Turn Deceleration Lanes:

- An eastbound right turn deceleration lane exists and **is** warranted today and based on projected 2026 background plus project traffic being 265 eastbound right turns during the peak hour and the threshold being 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is deceleration plus taper length. The eastbound right turn lane is currently 250 feet long with a 200-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length requirement is 600 feet plus a 225-foot taper. Therefore, the existing eastbound right turn lane does not meet current CDOT requirements. It is recommended that this lane be constructed to 600 feet plus a 225-foot taper.

- A westbound right turn deceleration lane exists and **is** warranted today and based on projected 2026 background plus project traffic being 395 westbound right turns during the peak hour and the threshold being 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is deceleration plus taper length. The westbound right turn lane is currently 250 feet long with a 275-foot taper. Based on the 55-mile per hour speed limit, the deceleration lane length requirement is 600 feet plus a 225-foot taper. Therefore, the existing westbound right turn lane does not meet current CDOT requirements. It is recommended that this lane be constructed to 600 feet plus a 225-foot taper.

Acceleration Lanes:

- An eastbound acceleration lane along SH-94 from the Marksheffel Road northbound right turn **is** warranted today and based on projected 2026 background plus project traffic being 30 northbound right turns during the peak hour and the threshold being 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is acceleration, and taper lengths. The right turn lane currently has no acceleration lane. Based on the 65-mile per hour speed limit, a 1,380-foot acceleration lane with 300-foot taper is recommended.

- A westbound acceleration lane along SH-94 from the Marksheffel Road southbound right turn **is** warranted based on projected 2026 background plus project traffic being 255 westbound right turns during the peak hour and the threshold being 10 vph. Since SH-94 has a category of E-X the right turn lane requirement is acceleration, and taper lengths. The right turn lane currently has no acceleration lane. Based on the 40-mile per hour speed limit, a 380-foot acceleration lane with a 145-foot taper is required; however, it is recommended that this acceleration lane be a continuous lane to tie into the outside westbound through lane on the approach to US-24.

5.7 Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 8** with calculations provided within the level of service operational sheets of **Appendix D** for the unsignalized intersections and **Appendix F** for signalized intersections.

Table 8 – Turn Lane Storage Length Analysis Results

Intersection Turn Lane	Existing Turn Lane Length (feet)	2026 Calculated Queue Length (feet)	2026 Recommended Turn Lane Length (feet)	2040 Calculated Queue Length (feet)	2040 Recommended Turn Lane Length (feet)
US-24 (EB/WB) & Marksheffel Road (NB/SB) (#1)					
Eastbound Left	1200' DL	406' DL	1200' DL	535' DL	1200' DL
Eastbound Right	575'	FREE	575'	25'	575'
Westbound Left	1100'	214' DL	1,100' **DL** (CDOT)	261' DL	1,100' DL (CDOT)
Westbound Right	700'	FREE	700'	25'	700'
Northbound Left	300'	27'	300'	36'	300'
Northbound Right	375'	FREE	375'	FREE	375'
Southbound Left	375'	47'	375'	58'	375'
Southbound Right	C	FREE	C	FREE	C
SH-94 & US-24 (#2)					
Eastbound Newt Drive Left	375' DL	51'	375' DL	56'	375' DL
Eastbound Newt Drive Right	C	FREE	C	FREE	C
Westbound SH-94 Left	475' DL	385'	**645' (CDOT) TL**	626' TL	**760' (CDOT) TL**
Westbound SH-94 Right	475'	FREE	475'	FREE	475'
Northbound US-24 Left	900'	316' DL	900' DL	377'	900' DL
Northbound US-24 Right	600'	FREE	600'	FREE	600'
Southbound US-24 Left	800'	25'	800'	25'	800'
Southbound US-24 Right	800'	25'	800'	25'	800'
SH-94 & Marksheffel Road (#3)					
Eastbound Left	300'	244'	**750' (CDOT)**	348'	**835' (CDOT)**
Eastbound Right	250'	51'	**600' (CDOT)**	599'	600' (CDOT)
Westbound Left	225'	61'	**650' (CDOT)**	68'	650' (CDOT)
Westbound Right	250'	227'	**600' (CDOT)**	358'	600' (CDOT)
Northbound Left	375'	275'	375'	263' DL	375' DL
Northbound Right	400'	FREE	400'	-	**-**
Southbound Left	400'	339'	400'	400'	400'
Southbound Right	400'	FREE	400'	FREE	400'
Marksheffel Rd North Access (#4)					
Eastbound Right	DNE	25'	**C**	25'	C
Northbound Left	DNE	25'	**295'+200' T (CS)**	25'	295'+200' T (CS)
Southbound Right	DNE	25'	**235'+200' T (CS)**	25'	235'+200' T (CS)
Marksheffel Rd South Access (#5)					
Eastbound Left	DNE	119'	**C**	124'	C
Eastbound Right	DNE	79'	**335'+140'T (EPC)**	128'	335'+140'T (EPC)
Northbound Left	DNE	70'	**390'+200' T (CS)**	158'	390'+200' T (CS)
Southbound Right	DNE	25'	**235'+200' T (CS)**	25'	235'+200' T (CS)
Internal Access Intersection (#6)					
Westbound Left	DNE	25'	**C**	50'	C
Westbound Right	DNE	25'	**235' (EPC)**	25'	235'(EPC)
Internal Air Lane Intersection (#7)					
Westbound Right	DNE	25'	**135' (EPC)**	25'	135'(EPC)

* = Maximum Possible Length, DL = Dual Left Turn Lanes, TL = Triple Left Turn Lanes, DNE = Does Not Exist, C = Continuous Lane, FREE = Free Right Turn Movement, NA = Not Applicable, (CDOT) = CDOT Standard, (CS) = Colorado Springs Standard, (EPC) = El Paso County Standard, **Blue text = Improvement or New Turn Lane**

Turn lane lengths along Marksheffel Road were recommended based on City of Colorado Springs standards, whereas internal turn lane lengths are based on El Paso County Standards. It should be noted that 95th percentile vehicle queue lengths were recommended if they were reporting lengths longer than design standards.

Left turn lanes are warranted along El Paso County roadways when the left turning volume is greater than 25 vehicles per hour while right turn lanes are warranted when the right turning volumes is greater than 50 vehicles per hour. According to Section 3.5: Auxiliary Turn Lanes of the CDOT Access Code which the El Paso County Standards are based on, the auxiliary lanes required in the category design standards may be waived when the 20-year horizon predicted roadway volumes conflicting with the turning vehicle are below the following minimum volume thresholds. The right turn lane may be dropped if the volume if the travel lane is predicted to be below 150 directional hourly volumes (DHV). The left turn lane may be dropped if the opposing traffic is predicted to be below 100 DHV. This waiver was applied to the internal street intersections.

Based on El Paso County standards for a design speed of 35 mph, the recommended left-turn lanes and right turn lanes internal to Crossroads North should provide 135 feet of deceleration length plus 140-foot tapers while all left turn lanes and right turn lanes that require a stop will also provide a storage length (determined from ECM Table 2-30 for each location).

To meet El Paso County standards, it is recommended that a 335-foot eastbound right turn lane be designated at south access along Marksheffel Road (#5). It is recommended that a 235-foot westbound right turn lane be designated at the Crossroads North internal intersection #6. A 135-foot westbound right turn lane is recommended to be designated at the Air Lane Intersection (#7).

5.8 Crossroads North: North Access Sensitivity Analysis

A sensitivity analysis within Crossroads North has been prepared comparing the north access along Marksheffel Road as a full movement signalized intersection and a three-quarter movement unsignalized intersection. As such, an intersection operational, vehicle queuing, signal progression, and safety evaluation has been analyzed and prepared comparing both access scenarios.

Intersection Operational Analysis

A traffic operational analysis comparing the north access along Marksheffel Road as a full movement signalized intersection and as a three-quarter movement unsignalized intersection has been evaluated to determine operational differences. **Table 9** provides the results of the level of service at the two control access intersections (#4 and #5) for both access scenarios to Crossroads North.

Table 9 – Crossroads North Access Scenarios LOS Results

	2026 Total Traffic				2040 Total Traffic			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Access and Movement	**Control Delay (sec/ veh)**	**LOS**	**Control Delay (sec/ veh)**	**LOS**	**Control Delay (sec/ veh)**	**LOS**	**Control Delay (sec/ veh)**	**LOS**
Crossroads North: Marksheffel Road North Access (#4) (3/4 Movements – Unsignalized)					#	#	#	#
Northbound Left	15.6	C	12.9	B	12.3	B	14.9	B
Eastbound Right	17.8	C	14.8	B	13.9	B	14.4	B
Crossroads North: Marksheffel Rd North Access (#4) (Full Movements - Signal)	8.6	A	6.9	A	# 7.4	# A	# 6.0	# A
Crossroads North: Marksheffel Rd South Access (#5) (Signal w/ North Access 3/4 Movements)	17.0	B	15.4	B	# 15.6	# B	# 17.6	# B
Crossroads North: Marksheffel Rd South Access (#5) (Signal w/ North Access Signalized)	9.3	A	7.3	A	# 8.7	# A	# 6.0	# A

= Three northbound and southbound through lanes

As shown in **Table 9**, both proposed access intersections (#4 and #5) to Crossroads North along Marksheffel Road are expected to operate acceptably with LOS C or better during the peak hours

under both access scenarios. It should be noted that the south access (#5) along Marksheffel Road is expected to have delays increase by approximately 12 seconds (from LOS A to LOS B) during the peak hours in 2040 if the north access is unsignalized.

Vehicle Queuing Analysis

A vehicle queuing analysis comparing the north access along Marksheffel Road as a full movement signalized intersection and as a three-quarter movement unsignalized intersection has been evaluated to determine potential vehicle queuing deficiencies. **Table 10** provides the results of the 95th percentile vehicle queues at the two control access intersections (#4 and #5) for both access scenarios to Crossroads North.

Table 10 – Crossroads North Access Scenarios Vehicle Queuing Results

Intersection Turn Lane	2026 Calculated Queue Length (feet)	2040 Calculated Queue Length (feet)
Crossroads North: Marksheffel Rd North Access (#4) (3/4 Movements – Unsignalized)		#
Eastbound Right	25’	25’
Northbound Left	25’	25’
Crossroads North: Marksheffel Rd North Access (#4) (Full Movements - Signal)		#
Eastbound Left	145’	156’
Eastbound Right	55’	56’
Northbound Left	25’	53’
Southbound Right	25’	40’
Crossroads North: Marksheffel Rd South Access (#5) (Signal w/ North Access 3/4 Mvmts)		#
Eastbound Left	220’	244’
Eastbound Right	73’	76’
Northbound Left	83’	179’
Southbound Right	32’	56’
Crossroads North: Marksheffel Rd South Access (#5) (Signal w/ North Access Signalized)		#
Eastbound Left	119’	124’
Eastbound Right	79’	128’
Northbound Left	70’	158’
Southbound Right	25’	25’

= Three northbound and southbound through lanes

As shown in **Table 10**, vehicle queues are relatively uniform between the two access intersections when both are signalized. Eastbound left exiting vehicle queues are more than 100 feet longer at the south access intersection when the north access intersection is stop controlled as all traffic with destinations to the north are routed through the south access.

Signal Progression Analysis

A traffic signal progression analysis was conducted along the approximate 1.6-mile-long segment of Marksheffel Road from Meadowbrook Parkway to the north to the proposed Reagan Ranch full access to the south due to the proposed signalization of the south access intersections (#5) to Crossroads North, the Space Village Avenue intersection as well as one of the proposed Reagan Ranch accesses. Although the Marksheffel Road North Access (#4) is recommended as a three-quarter movement for purposes of this signal progression analysis it was included as a signalized intersection to be conservative. As such, four (4) new signalized intersections and three (3) existing signalizations for a total of seven (7) signalized intersections were evaluated for progression along this corridor. Further, a comparison evaluation was conducted with the north access (#4) to Crossroads North along Marksheffel Road operating with stop control. In the second scenario, six (6) signalized intersections were evaluated for progression along the Marksheffel Road corridor. Additionally, two alternatives were provided based on the coordination at the US-24 and Marksheffel Road (#1) intersection. This intersection is currently coordinated east-west along US-24; therefore, an alternative analysis was provided for coordinating this intersection north-south along Marksheffel Road in the event that north-south coordination is desired in the future.

The signal progression analysis was conducted to determine if the four traffic signals proposed along Marksheffel Road would interrupt the northbound and southbound bandwidth and platooning of vehicles along Marksheffel Road. Bandwidth is the window of time within the cycle length of a traffic signal that allows vehicles to travel through coordinated intersections without stopping. The goal of signal coordination is to provide sufficient bandwidth to allow for the progression of traffic along a corridor. Intersection coordination bandwidths for the study area were estimated using *Synchro 10* and were evaluated under full buildout 2040 total traffic conditions during the weekday morning and afternoon peak hours.

With the intersection of Space Village Avenue/Marksheffel Road and three proposed access intersections (#4 and #5) along Marksheffel Road (two accesses to Crossroads North and one access to Reagan Ranch) as signalized intersections and coordinated with the intersections of Meadowbrook Parkway/Marksheffel Road, and SH-94/Marksheffel Road, and US-24/Marksheffel Road being coordinated east-west the available vehicle bandwidth through the studied Marksheffel Road corridor is anticipated to be 42 seconds northbound southbound during the morning peak hour in 2040. Likewise, the bandwidth during the afternoon peak hour is anticipated to be 43 seconds northbound and 45 seconds southbound in 2040. These bandwidths equate to a platoon efficiency of approximately 30 percent and 31/32 percent in the morning and afternoon peak hours, respectively.

With the north access (#4) to Crossroads North along Marksheffel Road operating with stop control and US-24/Marksheffel Road being coordinated east-west, the six (6) studied signalized intersections along the Marksheffel Road corridor are expected to have an available bandwidth of 42 seconds northbound and southbound during the morning peak hour in 2040. Likewise, the bandwidth during the afternoon peak hour is anticipated to be 43 seconds northbound and 46 seconds southbound in 2040. These bandwidths equate to a platoon efficiency of approximately 30 percent and 31/33 percent in the morning and afternoon peak hours, respectively.

With the intersection of Space Village Avenue/Marksheffel Road and three proposed access intersections (#4 and #5) along Marksheffel Road (two accesses to Crossroads North and one access to Reagan Ranch) as signalized intersections and coordinated with the intersections of Meadowbrook Parkway/Marksheffel Road, and SH-94/Marksheffel Road, and US-24/Marksheffel Road being coordinated north-south, the available vehicle bandwidth through the studied Marksheffel Road corridor is anticipated to be 42 seconds northbound southbound during the morning peak hour in 2040. Likewise, the bandwidth during the afternoon peak hour is anticipated to be 43 seconds northbound and 45 seconds southbound in 2040. These bandwidths equate to a platoon efficiency of approximately 30 percent and 31/32 percent in the morning and afternoon peak hours, respectively.

With the north access (#4) to Crossroads North along Marksheffel Road operating with stop control and US-24/Marksheffel Road being coordinated north-south, the six (6) studied signalized

intersections along the Marksheffel Road corridor are expected to have an available bandwidth of 42 seconds northbound and southbound during the morning peak hour in 2040. Likewise, the bandwidth during the afternoon peak hour is anticipated to be 43 seconds northbound and 46 seconds southbound in 2040. These bandwidths equate to a platoon efficiency of approximately 30 percent and 31/33 percent in the morning and afternoon peak hours, respectively.

The following **Table 11** summarizes the available bandwidths and platoon efficiencies for both access scenarios withing Crossroads North.

Table 11 – Signal Progression Comparison

Analysis Year and Peak	Bandwidth (seconds)		Platoon Efficiency (%)	
	Northbound	Southbound	Northbound	Southbound
US-24 & Marksheffel Road Coordinated East-West				
Crossroads North: Signalized North Access (7 studied signalized intersections)				
2040 Total AM	42 sec.	42 sec.	30%	30%
2040 Total PM	43 sec.	45 sec.	31%	32%
Crossroads North: Unsignalized North Access (6 studied signalized intersections)				
2040 Total AM	42 sec.	42 sec.	30%	30%
2040 Total PM	43 sec.	46 sec.	31%	33%
US-24 & Marksheffel Road Coordinated North-South				
Crossroads North: Signalized North Access (7 studied signalized intersections)				
2040 Total AM	42 sec.	42 sec.	30%	30%
2040 Total PM	43 sec.	45 sec.	31%	32%
Crossroads North: Unsignalized North Access (6 studied signalized intersections)				
2040 Total AM	42 sec.	42 sec.	30%	30%
2040 Total PM	43 sec.	46 sec.	31%	33%

Marksheffel Road is comparable to a NR-B: Non-Rural Arterial as defined in the State of Colorado State Highway Access Code. A goal platoon efficiency for an NR-B corridor is typically 30 percent or better, which has been achieved in 2040 for both directions of travel under both access scenarios and both coordination scenarios at the US-24/Marksheffel Road (#1) intersection. Therefore, it is believed that traffic signals at the intersections of Space Village Avenue/Marksheffel Road, two Crossroads North accesses (#4 and #5) and Marksheffel Road,

and Reagan Ranch Full Movement Access/Marksheffel Road would maintain an acceptable platoon efficiency along the Marksheffel Road corridor if coordinated with the adjacent traffic signals. Time-space diagrams for the corridor are attached in **Appendix G**.

Safety Evaluation

The north access to Crossroads North along Marksheffel Road meets standards for capacity operations, vehicle queues, and signal progression under a signal control. Further, national standards are met for signal warrants, sight distance, and intersection spacing at this access.

5.9 Safety Analysis

As requested by the State of Colorado Department of Transportation (CDOT) a Safety Analysis was performed for the state highway intersections in association with this project. Crash data was obtained for the most recent three-year timeframe available from January 2017 through December 2019, as provided in **Appendix H**. The following provides a discussion of the crash data and projections on an intersection-by-intersection basis.

US-24 and Marksheffel Road (#1)

A total of 35 crashes were reported at the intersection of US-24 and Marksheffel Road in the three-year study timer period. These 35 crashes resulted in 36 injuries and no fatalities. Most of the crashes occurred between two vehicles (29 crashes), with four crashes being single vehicle and two crashes including three or more vehicles. Of the 35 crashes, 24 occurred during daylight conditions, one at dawn or dusk, and 10 under dark conditions. The highest proportion of crashes were rear end (10 crashes) and approach turn (10 crashes). Additional crash types were broadside (6 crashes), sideswipe same (4 crashes), overturning (2 crashes), fixed objects (2 crashes), and sideswipe opposite (1 crash). Weather conditions were predominately nice with 31 crashes reported during no weather condition, one with rain, one with snow, one with fog, and one with wind. The crash rate is 83.79 per million vehicle miles traveled. In 2019, there were a total of 16 crashes at this intersection. With traffic volumes at this intersection anticipated to increase by 28 percent to 2026, the number of crashes at this intersection may increase to 20 per year. Recent improvements at this intersection (incorporated after the 2019 crash data) include dual left turn lanes from US-24 to southbound Marksheffel Road, which may improve intersection operations and safety. By 2040, traffic volumes are anticipated to increase by 73 percent. Therefore, crashes may be on the order of magnitude of 28 per year in the twenty-year planning

horizon. In the 2040 horizon, three through lanes are anticipated on all four approaches to this intersection.

US-24 and SH-94 (#2)

A total of 24 crashes were reported at the US-24 and SH-94 intersection in the three-year study timer period. These 24 crashes resulted in 19 injuries and no fatalities. Most of the crashes occurred between two vehicles (17 crashes), with one crash being a single vehicle and six crashes including three or more vehicles. Of the 24 crashes, 16 occurred during daylight conditions, two at dawn or dusk, and six under dark conditions. The highest proportion of crashes were rear end (12 crashes). Additional crash types were broadside (6 crashes), approach turn (4 crashes), sideswipe same (1 crash), and fixed objects (1 crash). Weather conditions were predominately nice with 22 crashes reported during no weather condition, one with rain, and one with snow. The crash rate is 38.45 per million vehicle miles traveled. In 2019, there were a total of 10 crashes at this intersection. With traffic volumes at this intersection anticipated to increase by 41 percent to 2026, the number of crashes at this intersection may increase to 14 per year. Improvements proposed by 2026 include triple westbound left turn lanes, dual northbound left turn lanes, and three through lanes on US-24. By 2040, traffic volumes are anticipated to increase by 87 percent. Therefore, crashes may be on the order of magnitude of 19 per year in the twenty-year planning horizon. Grade separated features of this intersection are anticipated sometime in the future to include possibly a grade separated westbound left turn.

SH-94 and Marksheffel Road (#3)

A total of 15 crashes were reported at the intersection of SH-94 and Marksheffel Road in the three-year study timer period. These 15 crashes resulted in 10 injuries and one (1) fatality. The fatal crash occurred in June of 2018 where a bus carrying 15 people turned left and collided with an eastbound through passenger car on eastbound SH-94. There was no weather, it was daylight, and the roadway was dry. No impairment was suspected for either driver and no apparent contributing factor was identified. It was noted that the both the eastbound and westbound left turns operate under permissive-only phasing. Safety could be improved of this intersection to implement protected/permitted or protected-only eastbound and westbound left turn phasing.

Most of the crashes occurred between two vehicles (13 crashes), with one crash being a single vehicle and one crash including three or more vehicles. Of the 15 crashes, 11 occurred during daylight conditions, one at dawn or dusk, and 3 under dark conditions. The highest proportion of crashes were rear end (6 crashes) and approach turn (5 crashes). Additional crash types were broadside (3 crashes) and domestic animal (1 crash). Weather conditions were predominately nice with 14 crashes reported during no weather condition and one with wind. The crash rate is 62.75 per million vehicle miles traveled due to the fatality. In 2019, there were a total of 7 crashes at this intersection. With traffic volumes at this intersection anticipated to increase by 53 percent to 2026, the number of crashes at this intersection may increase to 11 per year. The improvements proposed by this horizon include extending the eastbound and westbound left and right turn deceleration lanes along SH-94 to meet CDOT standards. In addition, acceleration lanes are proposed. These auxiliary turn lane improvements are anticipated to improve safety of the intersection. By 2040, traffic volumes are anticipated to increase by 139 percent. Therefore, crashes may be on the order of magnitude of 17 per year in the twenty-year planning horizon. Improvements anticipated at this horizon include two eastbound and westbound through lanes along SH-94 and three northbound and southbound through lanes along Marksheffel Road. The eastbound and westbound left turns should operate with protected/permitted left turn phasing.

Although these calculate possible future crashes at the key study intersections, vehicle technology is expected to continue to evolve with connected vehicles and autonomous safety features, which is anticipated to improve roadway safety. Therefore, the number of crashes may not increase at the same rate of the traffic volume increases as identified herein.

5.10 Road Impact Fees

Road impact fees were evaluated based on the El Paso County Road Impact Fee Schedule. The road impact fee for the proposed Crossroads North project is expected to be $1,807,338. Road impact fee calculations are shown in **Table 12**. During the final plat process, the project team will determine if the impact fees are paid up front or if the property will be included in one of the available public improvement districts with reduced upfront costs. The project team will determine payment methods with the final plat. The improvements along CDOT highways will be appropriately coordinated with CDOT while Marksheffel Road will be controlled by the City of Colorado Springs. The internal roadways to the project are not identified in the MTCP; therefore,

it is believed that improvements identified in this study are not reimbursable under the current MTCP.

Table 12 – Road Impact Fees

Use	Units	Per 1,000 SF or DU	Fee / Unit	Per Use Fee
Crossroads North				
Public Park (ITE 411)	50,000	50	3,372.00	$168,600.00
Movie Theatre (ITE 444)	52,000	52	4,958.00	$257,816.00
Tire Superstore (ITE 849)	7,000	7	4,958.00	$34,706.00
Home Improvement Superstore (ITE 862)	127,000	127	4,958.00	$629,666.00
Furniture Store (ITE 890)	114,000	114	4,958.00	$565,212.00
Sit Down Restaurant (ITE 932)	11,000	11	4,958.00	$54,538.00
Fast-Food Restaurant (ITE 934)	5,000	5	8,800.00	$44,000.00
Gas Station Super Convenience (ITE 960)	6,000	6	8,800.00	$52,800.00
Crossroads North Road Impact Fee				$1,807,338.00

5.11 Deviations from El Paso County Standards

Traffic volume projections along Air Lane meet the characteristics of an Urban Non-Residential Collector Street. Air Lane is designed with a modified cross section within the existing 60-foot ROW. The standard cross section includes two 18-foot travel lanes, a 12-foot median within 48 feet of pavement width, two 5-foot sidewalks, two 2.5-foot curb and gutters, two 8-foot tree lawns, with two 1-foot easements on both sides. The modified Air Lane cross section includes two 11-foot eastbound egress lanes at Marksheffel Road, and a 12-foot receiving lane, two 2.5-foot curb and gutters, and 23 feet of public improvements easements (11 feet on southern side and 12 feet on northern side of modified cross section). A deviation will need to be provided for this modified urban non-residential cross section along Air Lane for the County to consider for approval.

5.12 Improvement Summary

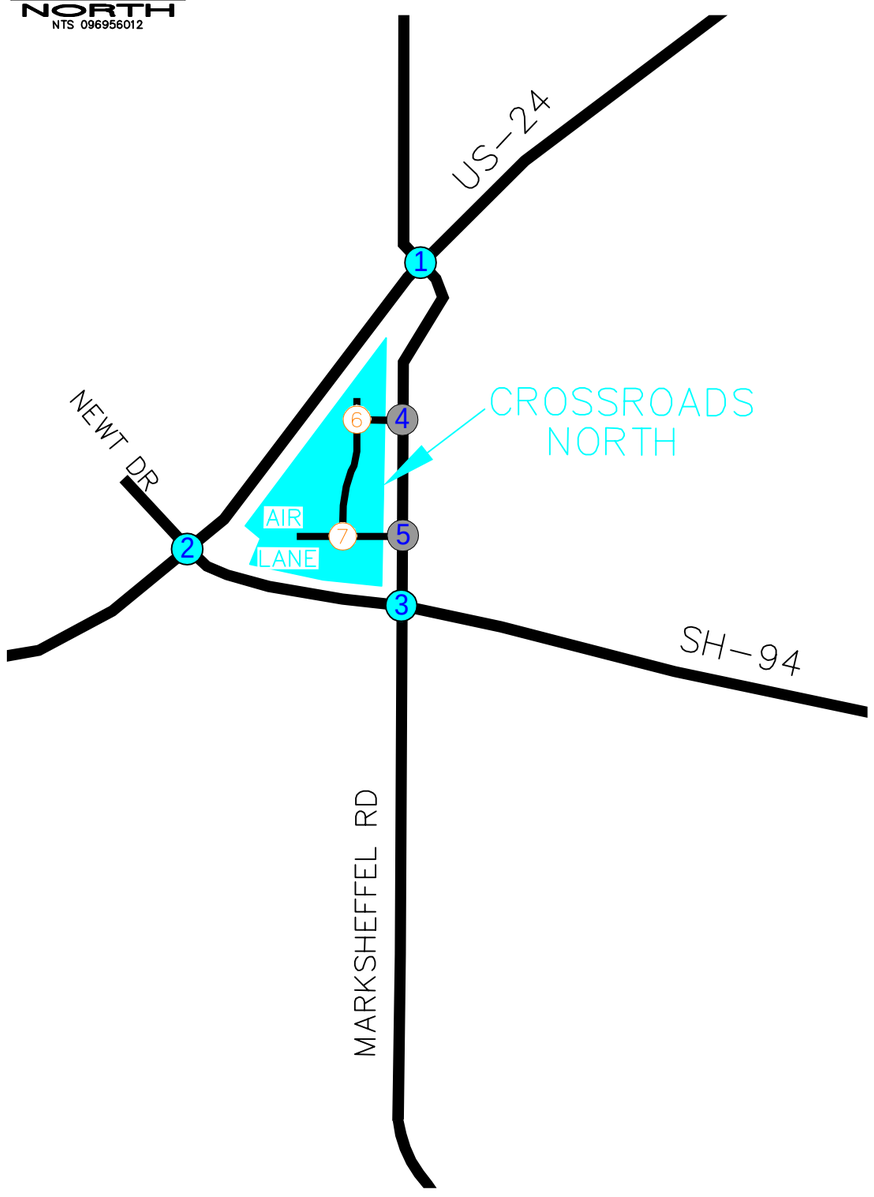
Based on the results of the level of service operational and turn lane analysis for the study area in the 2026 short term and 2040 long-term twenty-year horizons, anticipated improvements are identified as shown in **Figures 14** and **15**, respectively. Likewise, a recommended improvements summary table is provided in **Table 13**. The recommended improvements are based on the analysis provided for this area of Colorado Springs considering existing traffic volumes, background traffic volume growth from other development projects, and the project area. The improvements identified are not solely needed to accommodate Crossroads North, as it is the existing and background traffic volume growth that contribute to the improvement needs as well.

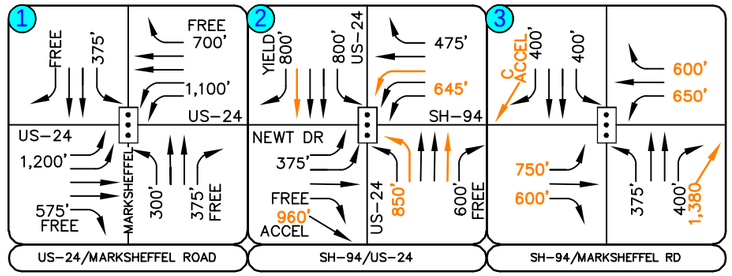
Table 13 – Crossroads North Improvement Summary

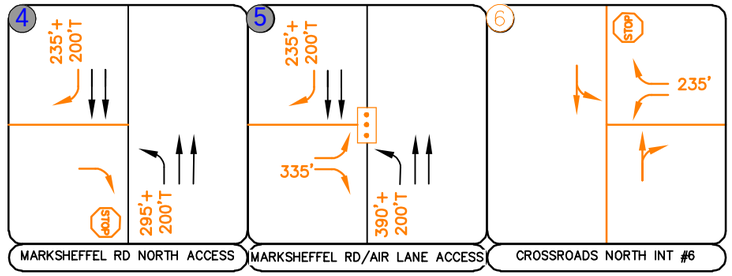
Intersection	Improvements	Horizon Year Needed	Associated Development Area
US-24 & Marksheffel Road (#1)	Optimized signal timings	2026	CDOT
	Three through lanes on all four approaches	2040	Regional
SH-94 & US-24 (#2)	Designate northbound dual left turn lanes with 850-feet plus 225-foot taper	Full Buildout	Crossroads Mixed Use
	Provide triple westbound left turn lanes with 645 feet plus 145-foot taper	Full Buildout	Reagan Ranch
	Extend eastbound to southwestbound right turn acceleration lane from 760 feet to 960 feet	Full Buildout	Crossroads Mixed Use
	Three US-24 northbound and southbound through lanes	Full Buildout	Regional
SH-94 & Marksheffel Road (#3)	Extend the 300-foot eastbound left turn lane to 750 feet with a 225-foot taper	Full Buildout	Crossroads North
	Extend the 250-foot eastbound right turn lane to 600 feet with a 225-foot taper	Full Buildout	Reagan Ranch
	Extend the 225-foot westbound left turn lane to 650 feet with a 225-foot taper	Full Buildout	Reagan Ranch
	Extend the 250-foot westbound right turn lane to 600 feet with a 225-foot taper	Full Buildout	Crossroads North
	Provide northbound to eastbound right turn acceleration lane	Full Buildout	Reagan Ranch
	Provide southbound to westbound right turn acceleration lane	Full Buildout	Crossroads North
	Optimized signal timings	2040	CDOT
	Provide northbound dual left turn lanes	2040	Reagan Ranch
	Provide two through lanes both eastbound and westbound and three through lanes both northbound and southbound	2040	Regional
Marksheffel Road North Access (#4)	Provide a northbound left turn lane with 295 feet plus 200-foot taper	Full Buildout	Crossroads North
	Provide a southbound right turn lane with 235 feet plus 200-foot taper	Full Buildout	Crossroads North
	Eastbound approach to provide a right turn lane and a R1-1 “STOP” sign	Full Buildout	Crossroads North
Marksheffel Road & Air Lane Access (#5)	Provide a northbound left turn lane with 390 feet plus 200-foot taper	Full Buildout	Crossroads North
	Provide a southbound right turn lane with 235 feet plus 200-foot taper	Full Buildout	Crossroads North
	Eastbound approach to provide a 335 foot right turn lane and a continuous left turn lane	Full Buildout	Crossroads North
	Signalized	Full Buildout	Crossroads North
Crossroads North Internal Access #6	Northbound and southbound approach with one shared lane for all movements	Full Buildout	Crossroads North
	Westbound approach to provide a continuous left turn lane, a 235-foot right turn lane and a R1-1 “STOP” sign	Full Buildout	Crossroads North

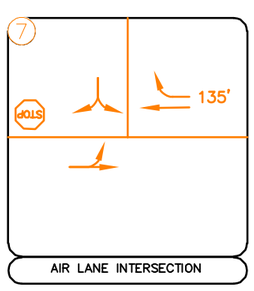
Intersection	Improvements	Horizon Year Needed	Associated Development Area
Air Lane Internal Intersection (#7)	Southbound approach to provide one shared left/right turn lane and a R1-1 “STOP” sign	Full Buildout	Crossroads North
	Eastbound approach to provide a shared left turn/through lane	Full Buildout	Crossroads North
	Westbound approach to provide one through lane and a 135-foot right turn lane	Full Buildout	Crossroads North

Kimley»Horn
NORTH
NTS 096956012









LEGEND

X	Existing Key Intersection		Signalized Intersection
X	Proposed Access Intersection	STOP	Stop Controlled Approach
X	Proposed Internal Intersection	C	Continuous Lane
←	Improvement	ACCEL	Acceleration Lane
T	Taper	100'	Turn Lane Length (feet)
FREE	Free Right Turn Lane		

CROSSROADS NORTH
COLORADO SPRINGS, CO
2026 RECOMMENDED LANE CONFIGURATIONS

FIGURE 14

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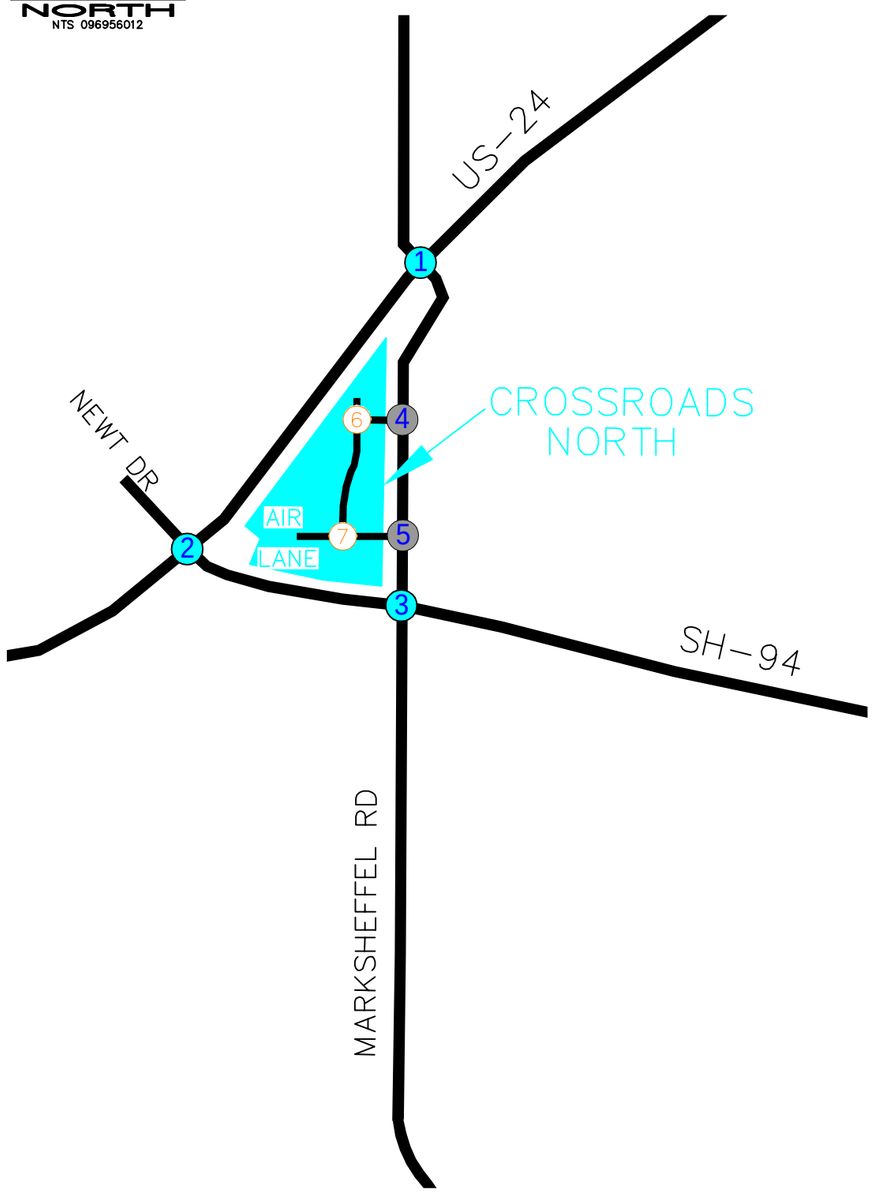
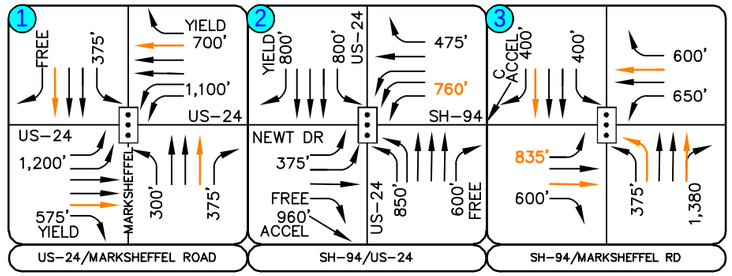
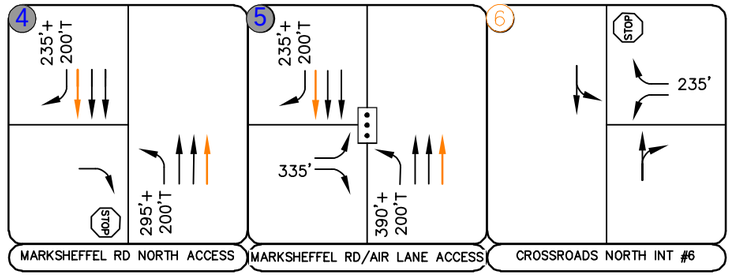
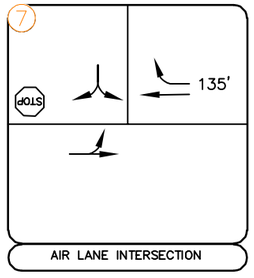
Kimley»Horn
NORTH
NTS 096956012









LEGEND

- Existing Key Intersection
- Proposed Access Intersection
- Proposed Internal Intersection
- Improvement
- T — Taper
- FREE — Free Right Turn Lane
- Signalized Intersection
- STOP — Stop Controlled Approach
- C — Continuous Lane
- ACCEL — Acceleration Lane
- 100' — Turn Lane Length (feet)

CROSSROADS NORTH
COLORADO SPRINGS, CO
2040 RECOMMENDED LANE CONFIGURATIONS

FIGURE 15

Kimley»Horn

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the complete analysis of the project area including existing and background traffic volumes from other sources and developments presented in this report, Kimley-Horn believes the Crossroads North development will be successfully incorporated into the existing and future roadway network. All of the area traffic combined including the proposed background traffic volume growth, project development, and expected future traffic volumes in the 2026 and 2040 full buildout horizons resulted in the following conclusions and recommendations:

2026 Recommendations:

- CDOT will likely require Access Permits for the intersections of SH-94/US-24 (#2) and SH-94/Marksheffel Road (#3) in association with the project.

- To maintain acceptable operations the signal timings at US-24/Marksheffel Road (#1) intersection may need to be optimized by 2026, with or without the addition of project traffic.

- The intersection of SH-94/US-24 (#2) currently operates poorly during the peak hours in the existing condition. As a regional capacity improvement, it was found that US-24 may need to provide three through lanes in each direction from the Peterson Road interchange through this intersection with SH-94 in the near-term horizon. The additional through lanes should be considered by CDOT in the near future. If and when US-24 is improved to provide three through lanes in each direction, it is recommended that a separate 600-foot plus 225-foot taper right turn deceleration lane be constructed to maintain free right turn movements to eastbound SH-94. For southwestbound US-24 at SH-94 (#2), the existing acceleration lane along US-24 will need to be reconstructed with 960 feet of length plus a 225-foot taper if and when US-24 is improved to provide three through lanes along westbound US-24. For northeastbound US-24 at SH-94, it is recommended that this acceleration lane be converted to the third northbound through lane as the acceleration lane is not warranted. Further, the northeastbound US-24 third through lane needs to continue for 1,200 feet plus provide a 660-foot taper based on MUTCD standards. In addition to these regional improvements, it is recommended that the existing single 900-foot left turn lane be changed to 850-feet plus 225-foot taper with dual left turn lanes on the northeastbound US-24 approach for the left turn to

Newt Drive. The area for these dual lefts is presently available (mostly); however, the lane is striped out which will require restriping with a slight extension that may also need to be constructed. Also, at the intersection of US-24 and SH-94 (#2), the existing dual westbound left turn lanes on SH-94 should be converted to triple left turn lanes by restriping the inside westbound through lane to a left turn lane. The inside two westbound left turn lanes should be extended to a length of 760 feet plus a 225-foot taper per CDOT requirements. Three receiving lanes will be available with the expansion of US-24 to three westbound lanes to the Peterson Road interchange off-ramp. A traffic signal modification will be required at the intersection to incorporate all of these improvements. As requested by CDOT, an additional analysis was performed with an interchange grade separation including a westbound left turn flyover ramp condition. With this westbound left turn flyover ramp and the existing two through lanes in each direction along US-24, the intersection of SH-94 and US-24 (#2) is expected to operate acceptably with LOS D during the peak hours in 2026 and LOS E during the peak hours in 2040. With three through lanes in each direction along US-24 and the implementation of the westbound let turn flyover ramp, this intersection is expected to operate acceptably during the peak hours in 2040.

- At SH-94 and Marksheffel Road (#3), it was found that the eastbound and westbound right turns should operate with overlap phasing, while the northbound and southbound right turns should operate with free movements with acceleration lanes constructed in accordance with the CDOT State Highway Access Code. The acceleration lane along westbound SH-94 is recommended to tie into the outside through lane on the approach to US-24. The eastbound left turn lane shall be extended to a length of 750 feet with a 225-foot taper while the westbound left turn lane should be extended to a length of 650 feet with a 225-foot taper. The eastbound and westbound right turn lanes should be extended to 600 feet. The eastbound acceleration lane from the Marksheffel Road northbound right turn should be constructed to 1,380 feet with a 300-foot taper. These improvements at this intersection may already be identified with the SH-94 improvements already being planned by CDOT.

- A traffic signal is anticipated to be needed and warranted at the south full movement access intersection (#5) along Marksheffel Road for Crossroads North. Therefore, a traffic signal is recommended for installation at this access intersection with development of Crossroads

North. To meet Colorado Springs standards, the northbound left turn at the Marksheffel Road South Access (#5) should provide a turn lane length of 390 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper. Lastly, separate eastbound left turn and right turn lanes are recommended to serve exiting traffic out of Crossroads North at this access.

- The Marksheffel Road North Access (#4) should operate as a three-quarter intersection with a R1-1 "STOP" sign installed on the eastbound approach. Based on Colorado Springs standards, the northbound left turn at the Marksheffel Road North Access (#4) should provide a turn lane length of 295 feet plus a 200-foot taper, whereas the southbound right turn lane should provide a lane length of 235 feet plus a 200-foot taper. A sensitivity analysis has been prepared later in Section 5.8 comparing the north access along Marksheffel Road as a full movement signalized intersection and a three-quarter movement unsignalized intersection.

- An internal street evaluation was conducted for the Crossroads North development area. The south access to Crossroads North along Marksheffel Road is proposed to be named Air Lane and is expected to be classified as an El Paso County Urban Non-Residential Collector roadway with a 60-foot right-of-way (ROW). Air Lane extends east/west and is proposed to connect with a north/south extending Non-Residential Collector Street (#7). Intersection #7 (collector to collector) is proposed to be located approximately 525 feet west of Marksheffel Road. The north/south extending Non-Residential Collector Street also connects with an east/west collector street (#6) that extends from the north access to Marksheffel Road. The north access street connecting with Marksheffel Road is proposed to be classified as an El Paso County Urban Non-Residential Collector roadway. To meet El Paso County standards for a design speed of 35 mph, the recommended left-turn lanes and right turn lanes internal to Crossroads North should provide 135 feet of deceleration length plus 140-foot tapers while all left turn lanes and right turn lanes that require a stop will also provide a storage length (determined from ECM Table 2-30 for each location).

- To meet El Paso County standards, it is recommended that a 335-foot eastbound right turn lane be designated at south access along Marksheffel Road (#5). It is recommended that a 235-foot westbound right turn lane be designated at the Crossroads North internal intersection

#6. A 135-foot westbound right turn lane is recommended to be designated at the Air Lane Intersection (#7).

2040 Recommendations:

- If future traffic volume projections are realized, US-24 may need to provide three through lanes in each direction through the Marksheffel Road intersection. Likewise, Marksheffel Road between US-24 and Peterson Air Force Base East Gate may need to provide three through lanes in each direction. It is recommended that traffic volumes continue to be monitored by CDOT and the City of Colorado Springs, as applicable, to determine if and when these regional improvements will be needed. It is understood that US-24 and Marksheffel Road are identified with four-lane cross-sections. If future traffic projections are realized, additional right-of-way may need to be dedicated to account for six-lane cross sections along both US-24 and Marksheffel Road within the study limits.

- To maintain acceptable operations the signal timings at SH-94/Marksheffel Road (#3) intersection may need to be optimized by 2040, with or without the addition of project traffic.

- Several extensions of auxiliary turn lanes may be needed by 2040 and should be monitored by CDOT and the City of Colorado Springs, as applicable, to determine if and when the recommended turn lane lengths will be needed.

General Recommendations:

- Any on-site and off-site roadway, signing, striping, and signal improvements should be incorporated into the Civil Drawings, and conform to City of Colorado Springs and/or CDOT standards as applicable, as well as the Manual on Uniform Traffic Control Devices – 2009 Edition (MUTCD.

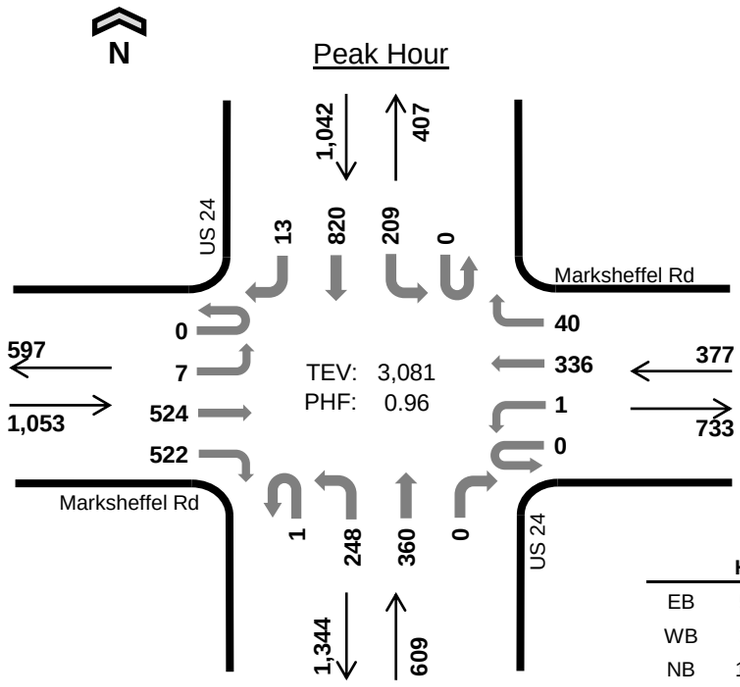
APPENDICES

APPENDIX A

Intersection Count Sheets

COVID-19 Count Adjustment Data

US 24
Marksheffel Rd



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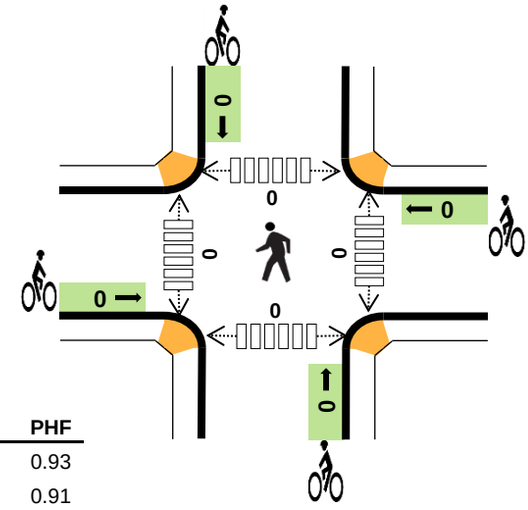


	HV %:	PHF
EB	5.5%	0.93
WB	3.2%	0.91
NB	10.5%	0.93
SB	3.9%	0.94
TOTAL	5.7%	0.96

Two-Hour Count Summaries

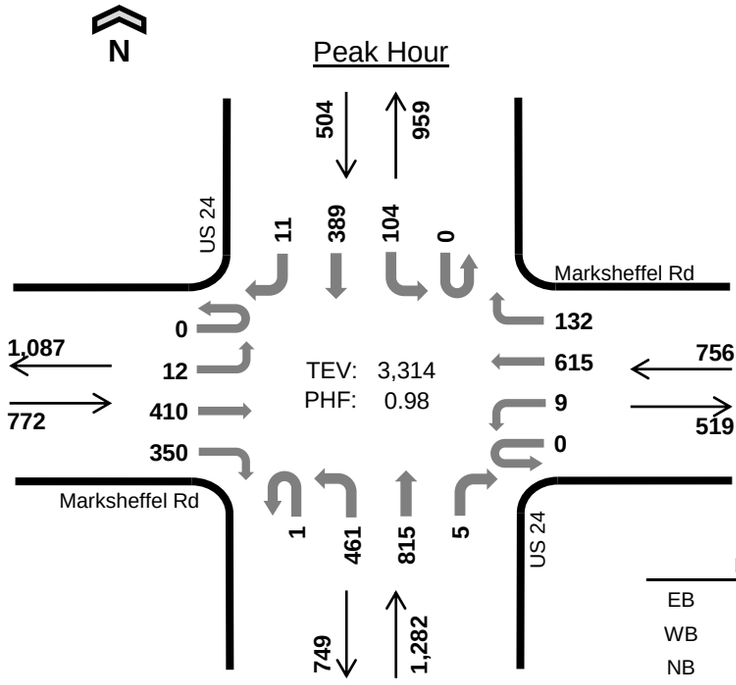
Interval Start	Marksheffel Rd Eastbound				Marksheffel Rd Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**122**	**138**	**0**	**0**	**94**	**6**	**0**	**68**	**96**	**0**	**0**	**50**	**203**	**1**	**778**	0
7:15 AM	**0**	**0**	**155**	**127**	**0**	**0**	**96**	**8**	**1**	**59**	**96**	**0**	**0**	**43**	**213**	**3**	**801**	0
7:30 AM	**0**	**3**	**123**	**142**	**0**	**1**	**80**	**14**	**0**	**62**	**78**	**0**	**0**	**59**	**214**	**5**	**781**	0
7:45 AM	**0**	**4**	**124**	**115**	**0**	**0**	**66**	**12**	**0**	**59**	**90**	**0**	**0**	**57**	**190**	**4**	**721**	**3,081**
8:00 AM	0	8	106	109	0	2	57	17	0	50	75	0	0	37	125	7	593	2,896
8:15 AM	0	1	87	90	0	0	48	16	0	50	73	1	0	42	138	1	547	2,642
8:30 AM	0	3	83	105	0	1	84	13	0	48	71	0	0	30	155	1	594	2,455
8:45 AM	0	0	92	85	0	2	58	8	0	52	91	0	0	39	162	5	594	2,328
Count Total	0	19	892	911	0	6	583	94	1	448	670	1	0	357	1,400	27	5,409	0
Peak Hour	**0**	**7**	**524**	**522**	**0**	**1**	**336**	**40**	**1**	**248**	**360**	**0**	**0**	**209**	**820**	**13**	**3,081**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**18**	**3**	**10**	**8**	***39***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**12**	**3**	**17**	**10**	***42***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**14**	**4**	**21**	**13**	***52***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**14**	**2**	**16**	**10**	***42***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	9	3	18	11	*41*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	9	1	12	7	*29*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	9	2	10	9	*30*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	11	4	22	21	*58*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	96	22	126	89	*333*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**58**	**12**	**64**	**41**	***175***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: (425) 250-0777 mark.skaggs@idaxdata.com

US 24
Marksheffel Rd



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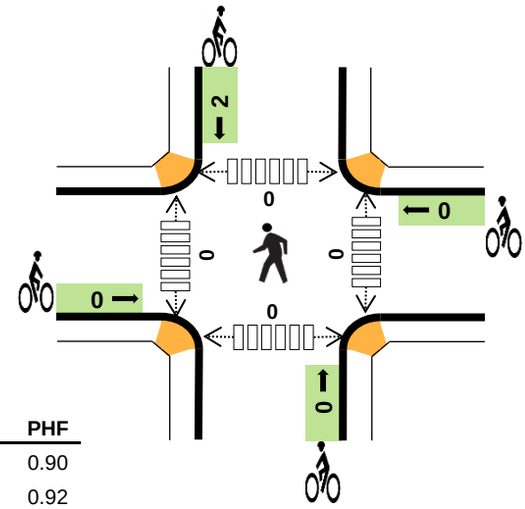

	HV %:	PHF
EB	2.8%	0.90
WB	1.3%	0.92
NB	1.7%	0.97
SB	2.8%	0.91
TOTAL	2.1%	0.98

Two-Hour Count Summaries

Interval Start	Marksheffel Rd Eastbound				Marksheffel Rd Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	102	84	0	3	163	33	0	78	159	0	1	21	132	0	778	0
4:15 PM	0	7	82	73	0	1	172	39	2	131	166	1	0	32	121	4	831	0
4:30 PM	**0**	**4**	**92**	**73**	**0**	**4**	**165**	**37**	**0**	**119**	**207**	**0**	**0**	**23**	**100**	**2**	**826**	0
4:45 PM	**0**	**5**	**117**	**92**	**0**	**1**	**162**	**34**	**0**	**128**	**185**	**4**	**0**	**17**	**90**	**5**	**840**	3,275
5:00 PM	**0**	**3**	**96**	**92**	**0**	**2**	**140**	**34**	**1**	**96**	**210**	**1**	**0**	**27**	**101**	**1**	**804**	3,301
5:15 PM	**0**	**0**	**105**	**93**	**0**	**2**	**148**	**27**	**0**	**118**	**213**	**0**	**0**	**37**	**98**	**3**	**844**	**3,314**
5:30 PM	0	3	111	87	0	1	115	29	0	108	178	1	0	15	109	2	759	3,247
5:45 PM	0	3	78	62	0	6	110	20	0	96	122	0	0	24	91	1	613	3,020
Count Total	0	27	783	656	0	20	1,175	253	3	874	1,440	7	1	196	842	18	6,295	0
Peak Hour	**0**	**12**	**410**	**350**	**0**	**9**	**615**	**132**	**1**	**461**	**815**	**5**	**0**	**104**	**389**	**11**	**3,314**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	12	3	7	8	*30*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	6	2	10	5	*23*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**4**	**4**	**6**	**6**	***20***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**6**	**2**	**6**	**1**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**7**	**2**	**6**	**3**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**5**	**2**	**4**	**4**	***15***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
5:30 PM	6	0	5	5	*16*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	2	2	3	2	*9*	0	0	0	1	*1*	0	0	0	0	*0*
Count Total	48	17	47	34	*146*	0	0	0	3	*3*	0	0	0	0	*0*
Peak Hour	**22**	**10**	**22**	**14**	***68***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***

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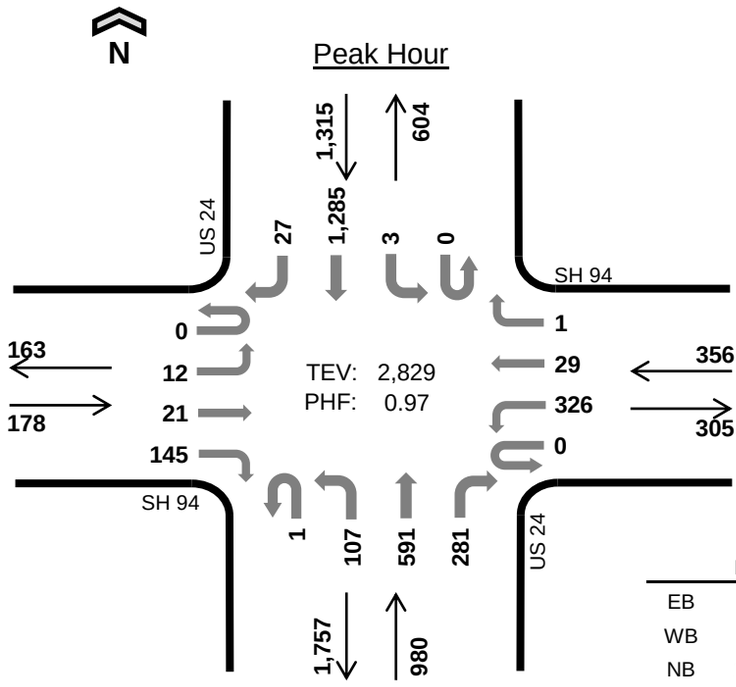
US 24
SH 94



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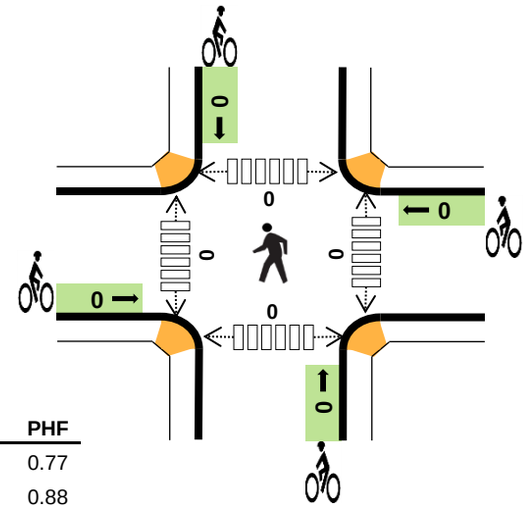
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	5.1%	0.77
WB	3.9%	0.88
NB	10.4%	0.97
SB	5.5%	0.96
TOTAL	7.0%	0.97

Two-Hour Count Summaries

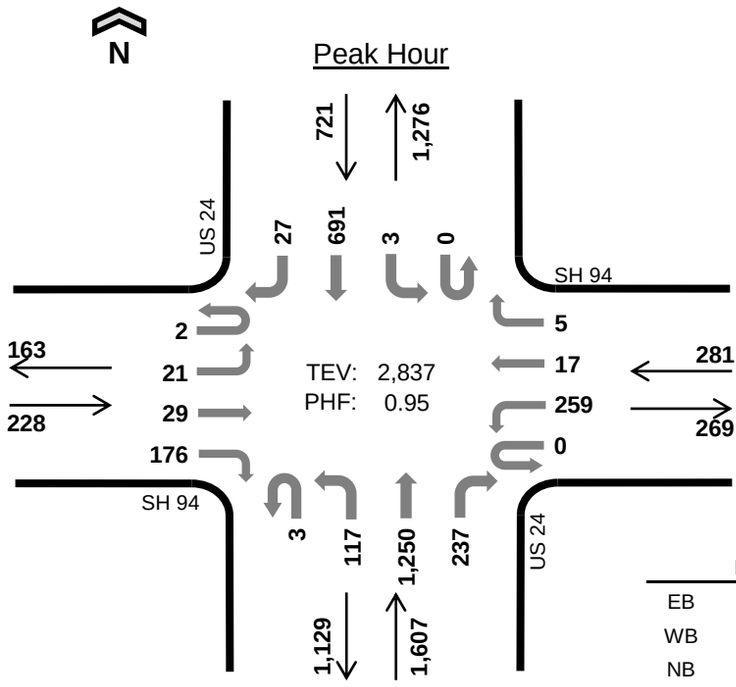
Interval Start	SH 94 Eastbound				SH 94 Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**1**	**6**	**45**	**0**	**81**	**10**	**0**	**0**	**27**	**147**	**65**	**0**	**1**	**319**	**7**	**709**	0
7:15 AM	**0**	**6**	**7**	**21**	**0**	**90**	**10**	**1**	**0**	**25**	**145**	**79**	**0**	**0**	**336**	**8**	**728**	0
7:30 AM	**0**	**5**	**6**	**47**	**0**	**85**	**5**	**0**	**0**	**20**	**152**	**80**	**0**	**0**	**310**	**6**	**716**	0
7:45 AM	**0**	**0**	**2**	**32**	**0**	**70**	**4**	**0**	**1**	**35**	**147**	**57**	**0**	**2**	**320**	**6**	**676**	**2,829**
8:00 AM	0	4	4	25	0	51	7	1	0	28	120	54	0	3	230	5	532	2,652
8:15 AM	0	4	4	34	0	51	6	0	1	17	107	64	0	1	207	10	506	2,430
8:30 AM	0	1	4	26	0	66	2	0	0	25	128	55	0	0	223	4	534	2,248
8:45 AM	0	3	7	29	0	48	6	1	1	23	131	44	0	1	197	9	500	2,072
Count Total	0	24	40	259	0	542	50	3	3	200	1,077	498	0	8	2,142	55	4,901	0
Peak Hour	**0**	**12**	**21**	**145**	**0**	**326**	**29**	**1**	**1**	**107**	**591**	**281**	**0**	**3**	**1,285**	**27**	**2,829**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

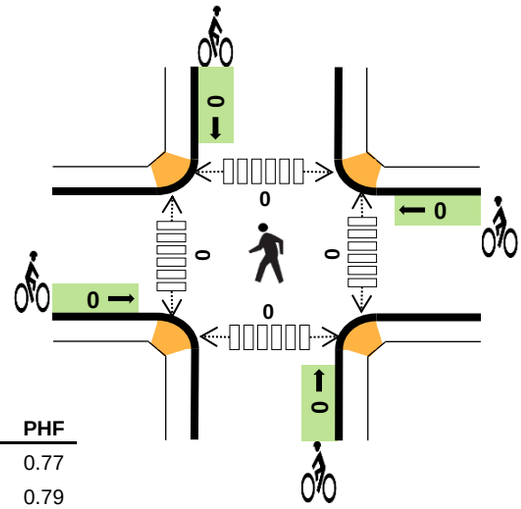
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**4**	**1**	**19**	**20**	***44***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**5**	**27**	**16**	***48***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**4**	**3**	**31**	**15**	***53***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**5**	**25**	**21**	***52***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	1	8	20	15	*44*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	3	2	24	9	*38*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	7	27	13	*47*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	5	15	18	*40*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	15	36	188	127	*366*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**9**	**14**	**102**	**72**	***197***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: (425) 250-0777 mark.skaggs@idaxdata.com

US 24
SH 94



Date: Tue, Jun 02, 2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	0.9%	0.77
WB	2.8%	0.79
NB	3.0%	0.96
SB	5.0%	0.90
TOTAL	3.3%	0.95

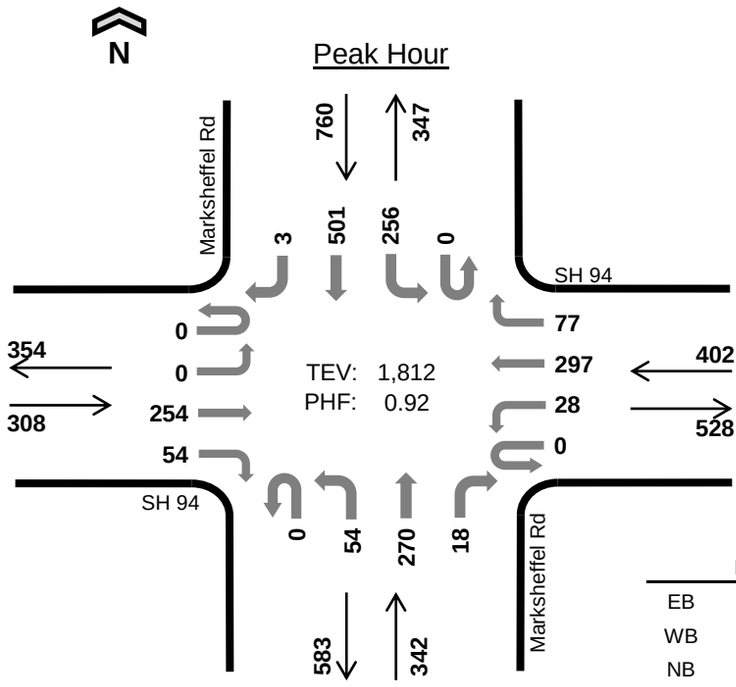
Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	4	32	0	73	7	0	1	31	284	80	1	2	177	7	704	0
4:15 PM	**0**	**5**	**4**	**45**	**0**	**51**	**2**	**2**	**1**	**30**	**327**	**62**	**0**	**3**	**153**	**7**	**692**	0
4:30 PM	**0**	**4**	**13**	**33**	**0**	**66**	**7**	**0**	**1**	**29**	**300**	**46**	**0**	**0**	**194**	**7**	**700**	0
4:45 PM	**0**	**9**	**1**	**40**	**0**	**83**	**5**	**1**	**0**	**31**	**307**	**53**	**0**	**0**	**158**	**7**	**695**	2,791
5:00 PM	**2**	**3**	**11**	**58**	**0**	**59**	**3**	**2**	**1**	**27**	**316**	**76**	**0**	**0**	**186**	**6**	**750**	**2,837**
5:15 PM	0	8	7	36	0	49	8	0	0	19	299	80	0	0	170	8	684	2,829
5:30 PM	0	5	4	29	0	44	7	1	0	19	267	85	0	0	183	4	648	2,777
5:45 PM	0	3	8	24	0	38	4	1	0	12	252	62	0	0	142	10	556	2,638
Count Total	2	42	52	297	0	463	43	7	4	198	2,352	544	1	5	1,363	56	5,429	0
Peak Hour	**2**	**21**	**29**	**176**	**0**	**259**	**17**	**5**	**3**	**117**	**1,250**	**237**	**0**	**3**	**691**	**27**	**2,837**	**0**

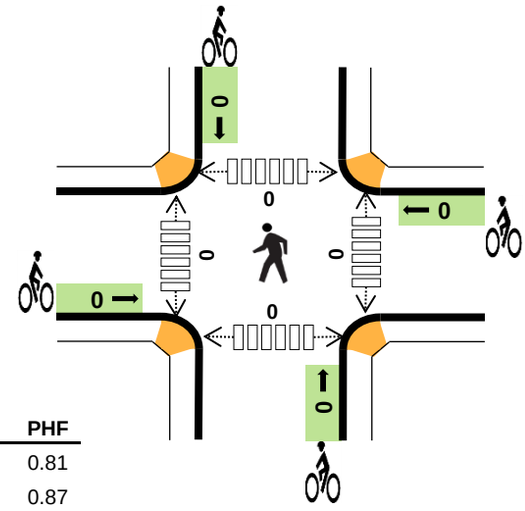
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	4	16	12	*32*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**0**	**3**	**11**	**12**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**1**	**1**	**20**	**12**	***34***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**1**	**14**	**5**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**3**	**4**	**7**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	1	2	10	6	*19*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	1	7	11	*21*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	2	3	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	6	17	85	72	*180*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**2**	**8**	**49**	**36**	***95***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Marksheffel Rd
SH 94



Date: Tue, Jun 02, 2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	8.1%	0.81
WB	5.5%	0.87
NB	4.7%	0.82
SB	2.6%	0.87
TOTAL	4.6%	0.92

Two-Hour Count Summaries

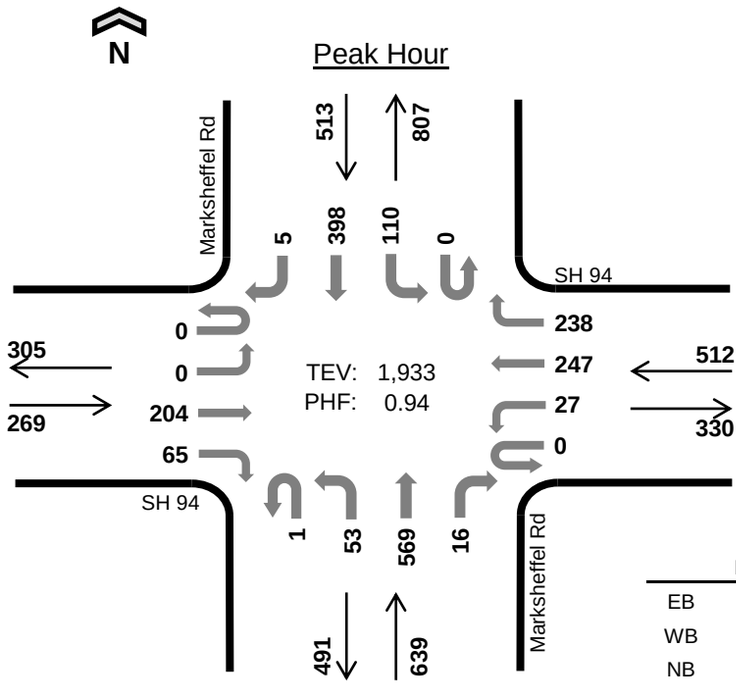
Interval Start	SH 94 Eastbound				SH 94 Westbound				Marksheffel Rd Northbound				Marksheffel Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**57**	**8**	**0**	**2**	**73**	**22**	**0**	**11**	**71**	**7**	**0**	**79**	**110**	**0**	**440**	0
7:15 AM	**0**	**0**	**79**	**16**	**0**	**7**	**87**	**21**	**0**	**10**	**51**	**3**	**0**	**74**	**143**	**1**	**492**	0
7:30 AM	**0**	**0**	**61**	**21**	**0**	**8**	**69**	**13**	**0**	**24**	**76**	**4**	**0**	**67**	**133**	**1**	**477**	0
7:45 AM	**0**	**0**	**57**	**9**	**0**	**11**	**68**	**21**	**0**	**9**	**72**	**4**	**0**	**36**	**115**	**1**	**403**	**1,812**
8:00 AM	0	4	39	14	0	2	43	12	0	10	50	2	0	47	115	1	339	1,711
8:15 AM	0	0	61	11	0	2	49	21	0	8	59	2	0	32	89	0	334	1,553
8:30 AM	0	1	50	15	0	6	67	25	0	9	52	4	0	32	85	1	347	1,423
8:45 AM	0	0	36	14	0	4	44	17	0	14	49	1	0	21	85	2	287	1,307
Count Total	0	5	440	108	0	42	500	152	0	95	480	27	0	388	875	7	3,119	0
Peak Hour	**0**	**0**	**254**	**54**	**0**	**28**	**297**	**77**	**0**	**54**	**270**	**18**	**0**	**256**	**501**	**3**	**1,812**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

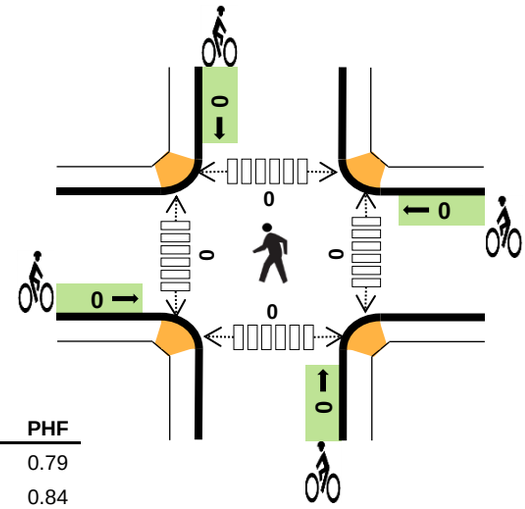
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**4**	**2**	**5**	**5**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**6**	**4**	**4**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**9**	**6**	**4**	**8**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**6**	**10**	**3**	**3**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	3	7	2	9	*21*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	10	5	2	4	*21*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	8	5	8	7	*28*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	8	6	1	5	*20*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	54	45	29	45	*173*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**25**	**22**	**16**	**20**	***83***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: (425) 250-0777 mark.skaggs@idaxdata.com

Marksheffel Rd
SH 94



Date: Tue, Jun 02, 2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	3.3%	0.79
WB	2.7%	0.84
NB	2.3%	0.92
SB	3.9%	0.97
TOTAL	3.0%	0.94

Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				Marksheffel Rd Northbound				Marksheffel Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**58**	**27**	**0**	**7**	**63**	**49**	**0**	**14**	**140**	**2**	**0**	**24**	**94**	**1**	**479**	0
4:15 PM	**0**	**0**	**57**	**15**	**0**	**10**	**65**	**78**	**1**	**10**	**142**	**6**	**0**	**28**	**102**	**1**	**515**	0
4:30 PM	**0**	**0**	**42**	**13**	**0**	**6**	**47**	**62**	**0**	**12**	**159**	**2**	**0**	**25**	**105**	**1**	**474**	0
4:45 PM	**0**	**0**	**47**	**10**	**0**	**4**	**72**	**49**	**0**	**17**	**128**	**6**	**0**	**33**	**97**	**2**	**465**	**1,933**
5:00 PM	1	1	72	14	0	5	52	48	0	8	107	2	0	20	84	2	416	1,870
5:15 PM	1	0	73	13	0	5	37	44	0	18	112	3	0	29	110	0	445	1,800
5:30 PM	0	0	69	19	0	1	40	31	0	12	75	3	0	28	115	0	393	1,719
5:45 PM	0	0	47	21	0	0	32	31	0	7	122	2	0	28	110	0	400	1,654
Count Total	2	1	465	132	0	38	408	392	1	98	985	26	0	215	817	7	3,587	0
Peak Hour	**0**	**0**	**204**	**65**	**0**	**27**	**247**	**238**	**1**	**53**	**569**	**16**	**0**	**110**	**398**	**5**	**1,933**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**1**	**5**	**4**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**2**	**3**	**4**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**4**	**5**	**8**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**4**	**2**	**2**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	1	2	2	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	2	1	3	2	*8*	0	0	1	0	*1*	0	0	0	0	*0*
5:30 PM	3	0	2	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	3	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	16	18	25	31	*90*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hour	**9**	**14**	**15**	**20**	***58***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: (425) 250-0777 mark.skaggs@idaxdata.com

Station ID: 103943
Date: 7/11/2019
Route: 094A
Description: SH 94 E/O Marksheffel Rd, Colorado Springs

COUNTDIR	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
P	21	16	9	23	82	299	705	500	366	246	211	243	253	246	252	271	391	383	282	193	178	120	99	54
S	17	6	10	14	45	141	322	359	287	278	237	292	270	272	395	606	824	541	282	153	90	54	40	51

Marsheffel and SH 94			
Peak Hour Counts	528	95%	
	402	89%	
Percent Difference	92%		

Marsheffel and SH 94			
Peak Hour Counts	330	118%	
	512	161%	
Percent Difference	144%		

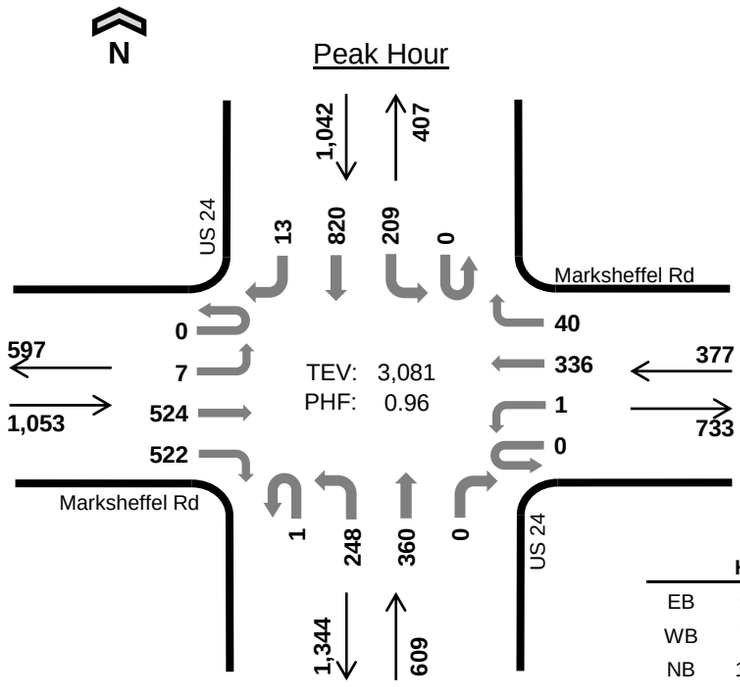
Station ID: 100851
Date: 2/20/2020
Route: 024G
Description: SH 24 NE/O SH 94, Colorado Springs

COUNTDIR	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
P	55	33	24	26	94	150	465	601	503	409	468	614	622	633	920	1088	1495	1289	704	712	452	268	159	82
S	36	17	38	95	301	818	1863	1716	1023	715	636	665	609	577	613	655	693	685	369	224	183	124	79	53

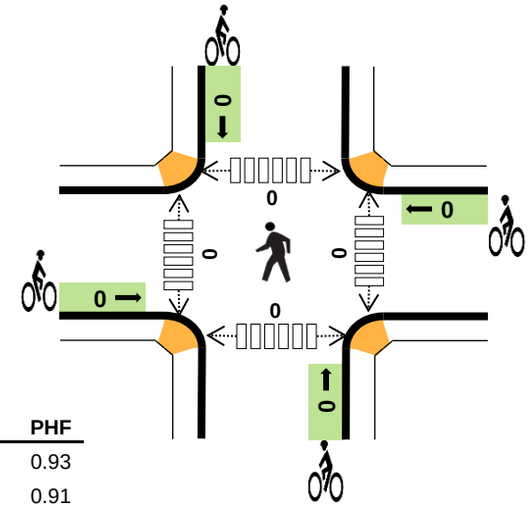
US 24 and SH 94			
Peak Hour Counts	604	100%	
	1315	130%	
Percent Difference	121%		
US 24 and Marksheffel			
Peak Hour Counts	609	99%	
	1344	128%	
Percent Difference	119%		

US 24 and SH 94			
Peak Hour Counts	1276	117%	
	721	96%	
Percent Difference	110%		
US 24 and Marksheffel			
Peak Hour Counts	1282	117%	
	749	93%	
Percent Difference	108%		

US 24
Marksheffel Rd



Date: Thu, Jun 04, 2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	5.5%	0.93
WB	3.2%	0.91
NB	10.5%	0.93
SB	3.9%	0.94
TOTAL	5.7%	0.96

Two-Hour Count Summaries

Interval Start	Marksheffel Rd Eastbound				Marksheffel Rd Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**122**	**138**	**0**	**0**	**94**	**6**	**0**	**68**	**96**	**0**	**0**	**50**	**203**	**1**	**778**	0
7:15 AM	**0**	**0**	**155**	**127**	**0**	**0**	**96**	**8**	**1**	**59**	**96**	**0**	**0**	**43**	**213**	**3**	**801**	0
7:30 AM	**0**	**3**	**123**	**142**	**0**	**1**	**80**	**14**	**0**	**62**	**78**	**0**	**0**	**59**	**214**	**5**	**781**	0
7:45 AM	**0**	**4**	**124**	**115**	**0**	**0**	**66**	**12**	**0**	**59**	**90**	**0**	**0**	**57**	**190**	**4**	**721**	**3,081**
8:00 AM	0	8	106	109	0	2	57	17	0	50	75	0	0	37	125	7	593	2,896
8:15 AM	0	1	87	90	0	0	48	16	0	50	73	1	0	42	138	1	547	2,642
8:30 AM	0	3	83	105	0	1	84	13	0	48	71	0	0	30	155	1	594	2,455
8:45 AM	0	0	92	85	0	2	58	8	0	52	91	0	0	39	162	5	594	2,328
Count Total	0	19	892	911	0	6	583	94	1	448	670	1	0	357	1,400	27	5,409	0
Peak Hour	**0**	**7**	**524**	**522**	**0**	**1**	**336**	**40**	**1**	**248**	**360**	**0**	**0**	**209**	**820**	**13**	**3,081**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**18**	**3**	**10**	**8**	***39***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**12**	**3**	**17**	**10**	***42***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**14**	**4**	**21**	**13**	***52***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**14**	**2**	**16**	**10**	***42***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	9	3	18	11	*41*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	9	1	12	7	*29*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	9	2	10	9	*30*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	11	4	22	21	*58*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	96	22	126	89	*333*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**58**	**12**	**64**	**41**	***175***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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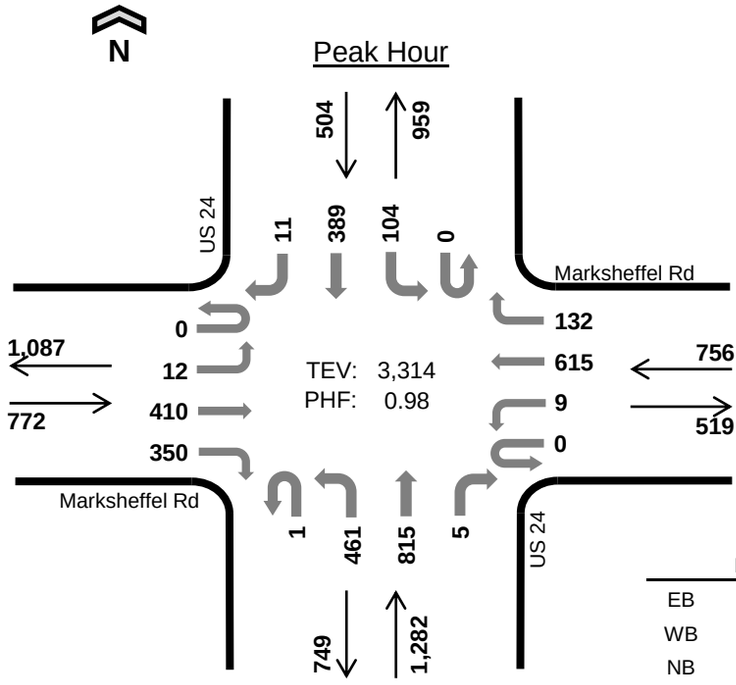
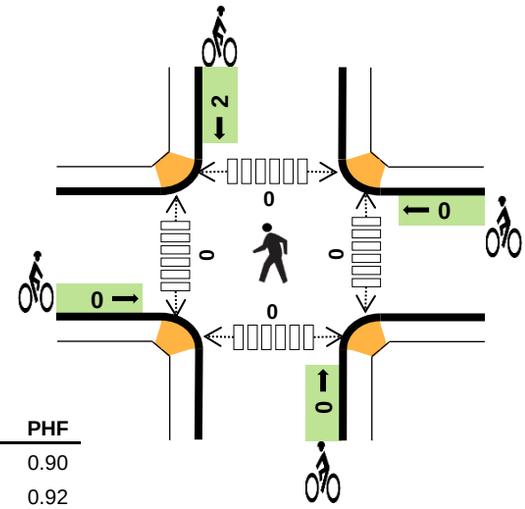
US 24
Marksheffel Rd



Date: Thu, Jun 04, 2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	2.8%	0.90
WB	1.3%	0.92
NB	1.7%	0.97
SB	2.8%	0.91
TOTAL	2.1%	0.98

Two-Hour Count Summaries

Interval Start	Marksheffel Rd Eastbound				Marksheffel Rd Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	102	84	0	3	163	33	0	78	159	0	1	21	132	0	778	0
4:15 PM	0	7	82	73	0	1	172	39	2	131	166	1	0	32	121	4	831	0
4:30 PM	**0**	**4**	**92**	**73**	**0**	**4**	**165**	**37**	**0**	**119**	**207**	**0**	**0**	**23**	**100**	**2**	**826**	0
4:45 PM	**0**	**5**	**117**	**92**	**0**	**1**	**162**	**34**	**0**	**128**	**185**	**4**	**0**	**17**	**90**	**5**	**840**	3,275
5:00 PM	**0**	**3**	**96**	**92**	**0**	**2**	**140**	**34**	**1**	**96**	**210**	**1**	**0**	**27**	**101**	**1**	**804**	3,301
5:15 PM	**0**	**0**	**105**	**93**	**0**	**2**	**148**	**27**	**0**	**118**	**213**	**0**	**0**	**37**	**98**	**3**	**844**	**3,314**
5:30 PM	0	3	111	87	0	1	115	29	0	108	178	1	0	15	109	2	759	3,247
5:45 PM	0	3	78	62	0	6	110	20	0	96	122	0	0	24	91	1	613	3,020
Count Total	0	27	783	656	0	20	1,175	253	3	874	1,440	7	1	196	842	18	6,295	0
Peak Hour	**0**	**12**	**410**	**350**	**0**	**9**	**615**	**132**	**1**	**461**	**815**	**5**	**0**	**104**	**389**	**11**	**3,314**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	12	3	7	8	*30*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	6	2	10	5	*23*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**4**	**4**	**6**	**6**	***20***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**6**	**2**	**6**	**1**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**7**	**2**	**6**	**3**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**5**	**2**	**4**	**4**	***15***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
5:30 PM	6	0	5	5	*16*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	2	2	3	2	*9*	0	0	0	1	*1*	0	0	0	0	*0*
Count Total	48	17	47	34	*146*	0	0	0	3	*3*	0	0	0	0	*0*
Peak Hour	**22**	**10**	**22**	**14**	***68***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***

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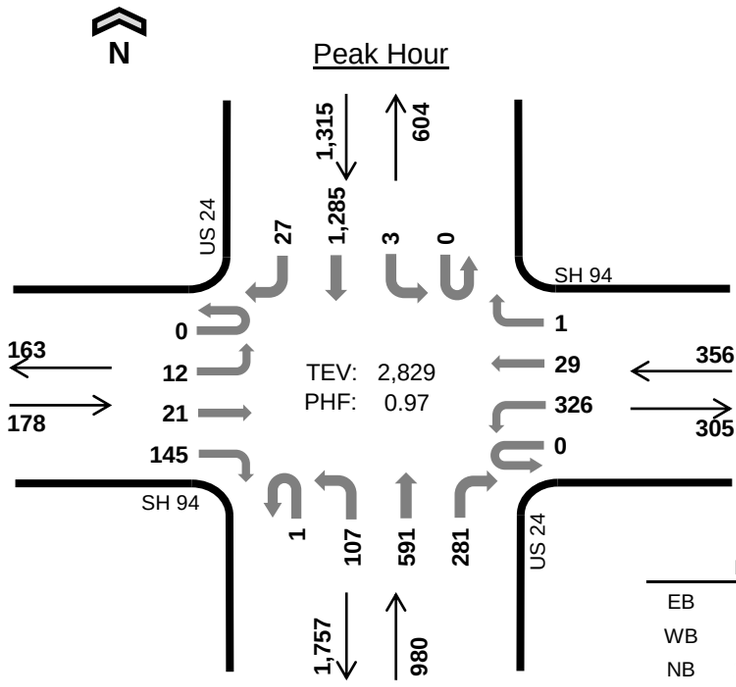
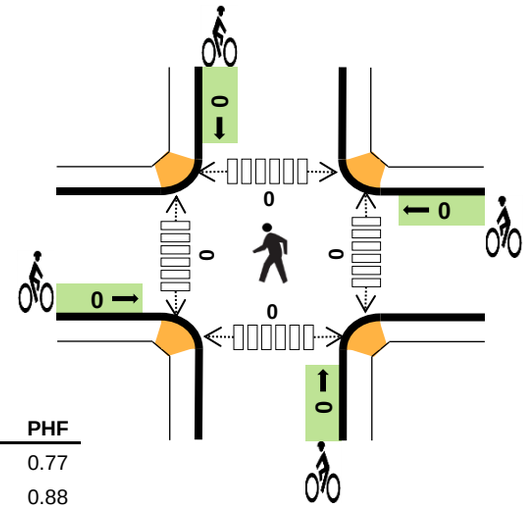
US 24
SH 94



Date: Tue, Jun 02, 2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	5.1%	0.77
WB	3.9%	0.88
NB	10.4%	0.97
SB	5.5%	0.96
TOTAL	7.0%	0.97

Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**1**	**6**	**45**	**0**	**81**	**10**	**0**	**0**	**27**	**147**	**65**	**0**	**1**	**319**	**7**	**709**	0
7:15 AM	**0**	**6**	**7**	**21**	**0**	**90**	**10**	**1**	**0**	**25**	**145**	**79**	**0**	**0**	**336**	**8**	**728**	0
7:30 AM	**0**	**5**	**6**	**47**	**0**	**85**	**5**	**0**	**0**	**20**	**152**	**80**	**0**	**0**	**310**	**6**	**716**	0
7:45 AM	**0**	**0**	**2**	**32**	**0**	**70**	**4**	**0**	**1**	**35**	**147**	**57**	**0**	**2**	**320**	**6**	**676**	**2,829**
8:00 AM	0	4	4	25	0	51	7	1	0	28	120	54	0	3	230	5	532	2,652
8:15 AM	0	4	4	34	0	51	6	0	1	17	107	64	0	1	207	10	506	2,430
8:30 AM	0	1	4	26	0	66	2	0	0	25	128	55	0	0	223	4	534	2,248
8:45 AM	0	3	7	29	0	48	6	1	1	23	131	44	0	1	197	9	500	2,072
Count Total	0	24	40	259	0	542	50	3	3	200	1,077	498	0	8	2,142	55	4,901	0
Peak Hour	**0**	**12**	**21**	**145**	**0**	**326**	**29**	**1**	**1**	**107**	**591**	**281**	**0**	**3**	**1,285**	**27**	**2,829**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**4**	**1**	**19**	**20**	***44***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**5**	**27**	**16**	***48***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**4**	**3**	**31**	**15**	***53***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**5**	**25**	**21**	***52***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	1	8	20	15	*44*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	3	2	24	9	*38*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	7	27	13	*47*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	5	15	18	*40*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	15	36	188	127	*366*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**9**	**14**	**102**	**72**	***197***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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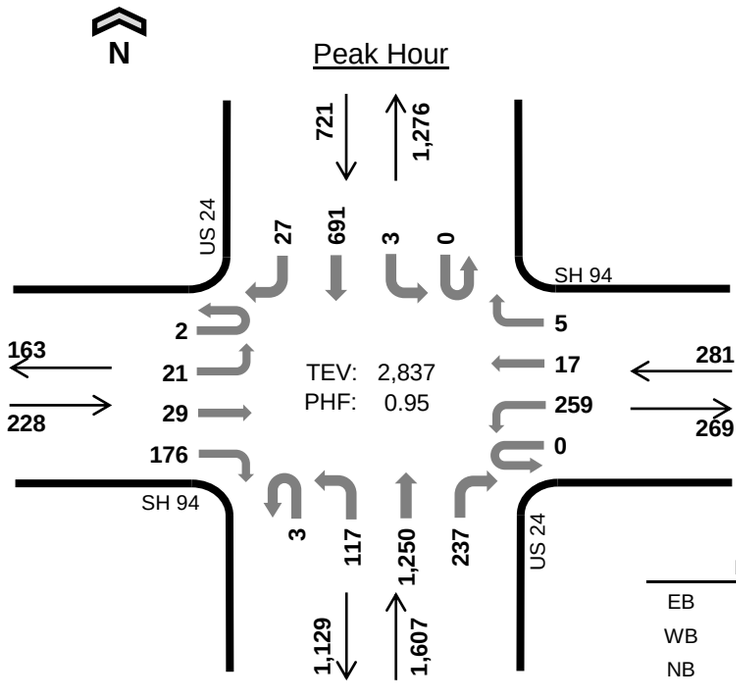
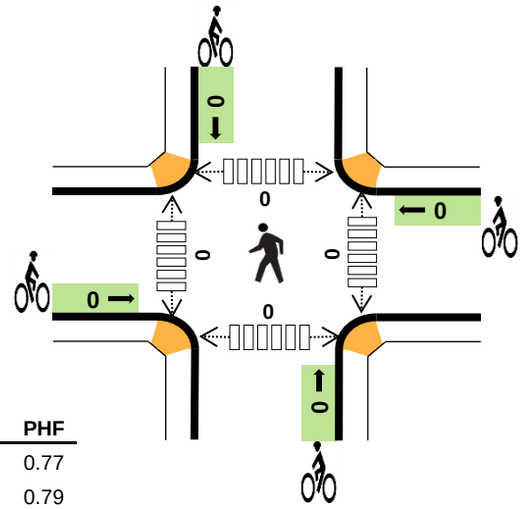
US 24
SH 94



Date: Tue, Jun 02, 2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	0.9%	0.77
WB	2.8%	0.79
NB	3.0%	0.96
SB	5.0%	0.90
TOTAL	3.3%	0.95

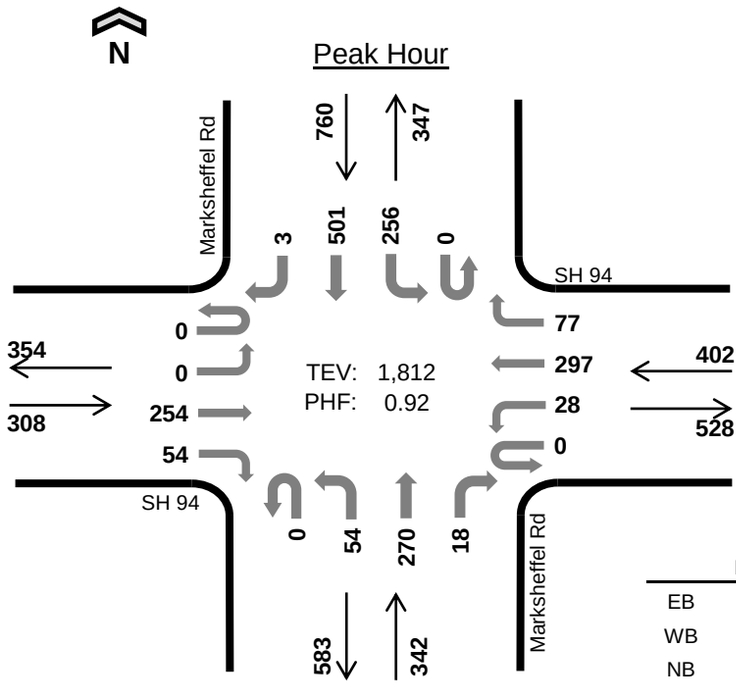
Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				US 24 Northbound				US 24 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	4	32	0	73	7	0	1	31	284	80	1	2	177	7	704	0
4:15 PM	**0**	**5**	**4**	**45**	**0**	**51**	**2**	**2**	**1**	**30**	**327**	**62**	**0**	**3**	**153**	**7**	**692**	0
4:30 PM	**0**	**4**	**13**	**33**	**0**	**66**	**7**	**0**	**1**	**29**	**300**	**46**	**0**	**0**	**194**	**7**	**700**	0
4:45 PM	**0**	**9**	**1**	**40**	**0**	**83**	**5**	**1**	**0**	**31**	**307**	**53**	**0**	**0**	**158**	**7**	**695**	2,791
5:00 PM	**2**	**3**	**11**	**58**	**0**	**59**	**3**	**2**	**1**	**27**	**316**	**76**	**0**	**0**	**186**	**6**	**750**	**2,837**
5:15 PM	0	8	7	36	0	49	8	0	0	19	299	80	0	0	170	8	684	2,829
5:30 PM	0	5	4	29	0	44	7	1	0	19	267	85	0	0	183	4	648	2,777
5:45 PM	0	3	8	24	0	38	4	1	0	12	252	62	0	0	142	10	556	2,638
Count Total	2	42	52	297	0	463	43	7	4	198	2,352	544	1	5	1,363	56	5,429	0
Peak Hour	**2**	**21**	**29**	**176**	**0**	**259**	**17**	**5**	**3**	**117**	**1,250**	**237**	**0**	**3**	**691**	**27**	**2,837**	**0**

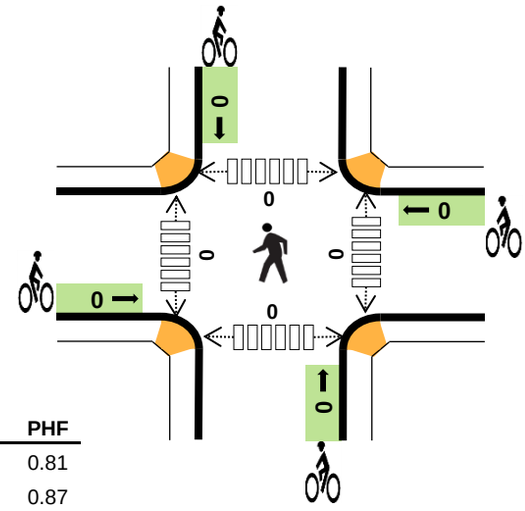
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	4	16	12	*32*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**0**	**3**	**11**	**12**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**1**	**1**	**20**	**12**	***34***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**1**	**14**	**5**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**3**	**4**	**7**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	1	2	10	6	*19*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	1	7	11	*21*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	2	3	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	6	17	85	72	*180*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**2**	**8**	**49**	**36**	***95***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Marksheffel Rd
SH 94



Date: Tue, Jun 02, 2020
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	8.1%	0.81
WB	5.5%	0.87
NB	4.7%	0.82
SB	2.6%	0.87
TOTAL	4.6%	0.92

Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				Marksheffel Rd Northbound				Marksheffel Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**57**	**8**	**0**	**2**	**73**	**22**	**0**	**11**	**71**	**7**	**0**	**79**	**110**	**0**	**440**	0
7:15 AM	**0**	**0**	**79**	**16**	**0**	**7**	**87**	**21**	**0**	**10**	**51**	**3**	**0**	**74**	**143**	**1**	**492**	0
7:30 AM	**0**	**0**	**61**	**21**	**0**	**8**	**69**	**13**	**0**	**24**	**76**	**4**	**0**	**67**	**133**	**1**	**477**	0
7:45 AM	**0**	**0**	**57**	**9**	**0**	**11**	**68**	**21**	**0**	**9**	**72**	**4**	**0**	**36**	**115**	**1**	**403**	**1,812**
8:00 AM	0	4	39	14	0	2	43	12	0	10	50	2	0	47	115	1	339	1,711
8:15 AM	0	0	61	11	0	2	49	21	0	8	59	2	0	32	89	0	334	1,553
8:30 AM	0	1	50	15	0	6	67	25	0	9	52	4	0	32	85	1	347	1,423
8:45 AM	0	0	36	14	0	4	44	17	0	14	49	1	0	21	85	2	287	1,307
Count Total	0	5	440	108	0	42	500	152	0	95	480	27	0	388	875	7	3,119	0
Peak Hour	**0**	**0**	**254**	**54**	**0**	**28**	**297**	**77**	**0**	**54**	**270**	**18**	**0**	**256**	**501**	**3**	**1,812**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**4**	**2**	**5**	**5**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**6**	**4**	**4**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**9**	**6**	**4**	**8**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**6**	**10**	**3**	**3**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	3	7	2	9	*21*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	10	5	2	4	*21*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	8	5	8	7	*28*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	8	6	1	5	*20*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	54	45	29	45	*173*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**25**	**22**	**16**	**20**	***83***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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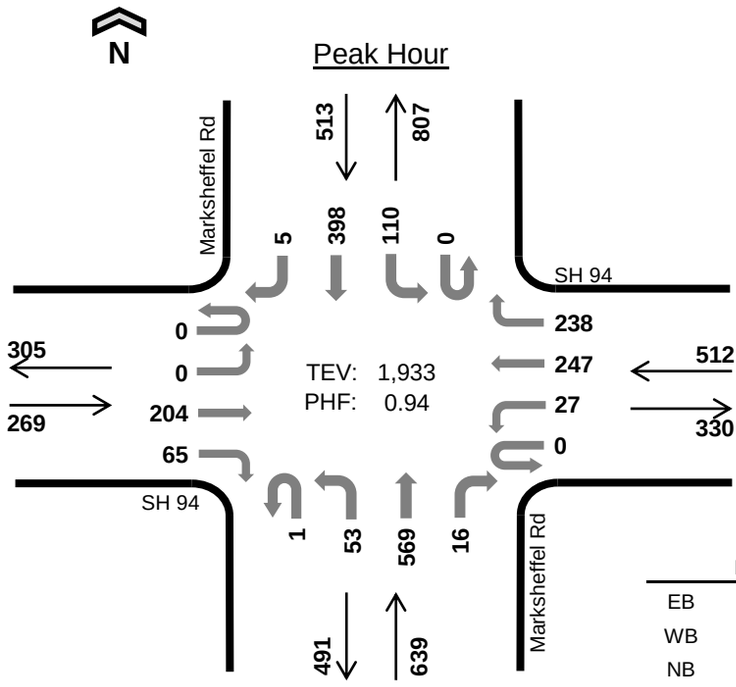
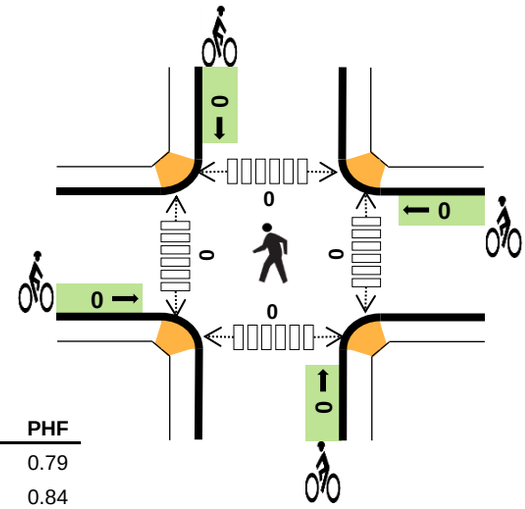
Marksheffel Rd
SH 94



Date: Tue, Jun 02, 2020
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	3.3%	0.79
WB	2.7%	0.84
NB	2.3%	0.92
SB	3.9%	0.97
TOTAL	3.0%	0.94

Two-Hour Count Summaries

Interval Start	SH 94 Eastbound				SH 94 Westbound				Marksheffel Rd Northbound				Marksheffel Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**58**	**27**	**0**	**7**	**63**	**49**	**0**	**14**	**140**	**2**	**0**	**24**	**94**	**1**	**479**	0
4:15 PM	**0**	**0**	**57**	**15**	**0**	**10**	**65**	**78**	**1**	**10**	**142**	**6**	**0**	**28**	**102**	**1**	**515**	0
4:30 PM	**0**	**0**	**42**	**13**	**0**	**6**	**47**	**62**	**0**	**12**	**159**	**2**	**0**	**25**	**105**	**1**	**474**	0
4:45 PM	**0**	**0**	**47**	**10**	**0**	**4**	**72**	**49**	**0**	**17**	**128**	**6**	**0**	**33**	**97**	**2**	**465**	**1,933**
5:00 PM	1	1	72	14	0	5	52	48	0	8	107	2	0	20	84	2	416	1,870
5:15 PM	1	0	73	13	0	5	37	44	0	18	112	3	0	29	110	0	445	1,800
5:30 PM	0	0	69	19	0	1	40	31	0	12	75	3	0	28	115	0	393	1,719
5:45 PM	0	0	47	21	0	0	32	31	0	7	122	2	0	28	110	0	400	1,654
Count Total	2	1	465	132	0	38	408	392	1	98	985	26	0	215	817	7	3,587	0
Peak Hour	**0**	**0**	**204**	**65**	**0**	**27**	**247**	**238**	**1**	**53**	**569**	**16**	**0**	**110**	**398**	**5**	**1,933**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**1**	**5**	**4**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**2**	**3**	**4**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**4**	**5**	**8**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**4**	**2**	**2**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	1	2	2	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	2	1	3	2	*8*	0	0	1	0	*1*	0	0	0	0	*0*
5:30 PM	3	0	2	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	3	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	16	18	25	31	*90*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hour	**9**	**14**	**15**	**20**	***58***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: (425) 250-0777 mark.skaggs@idaxdata.com

APPENDIX B

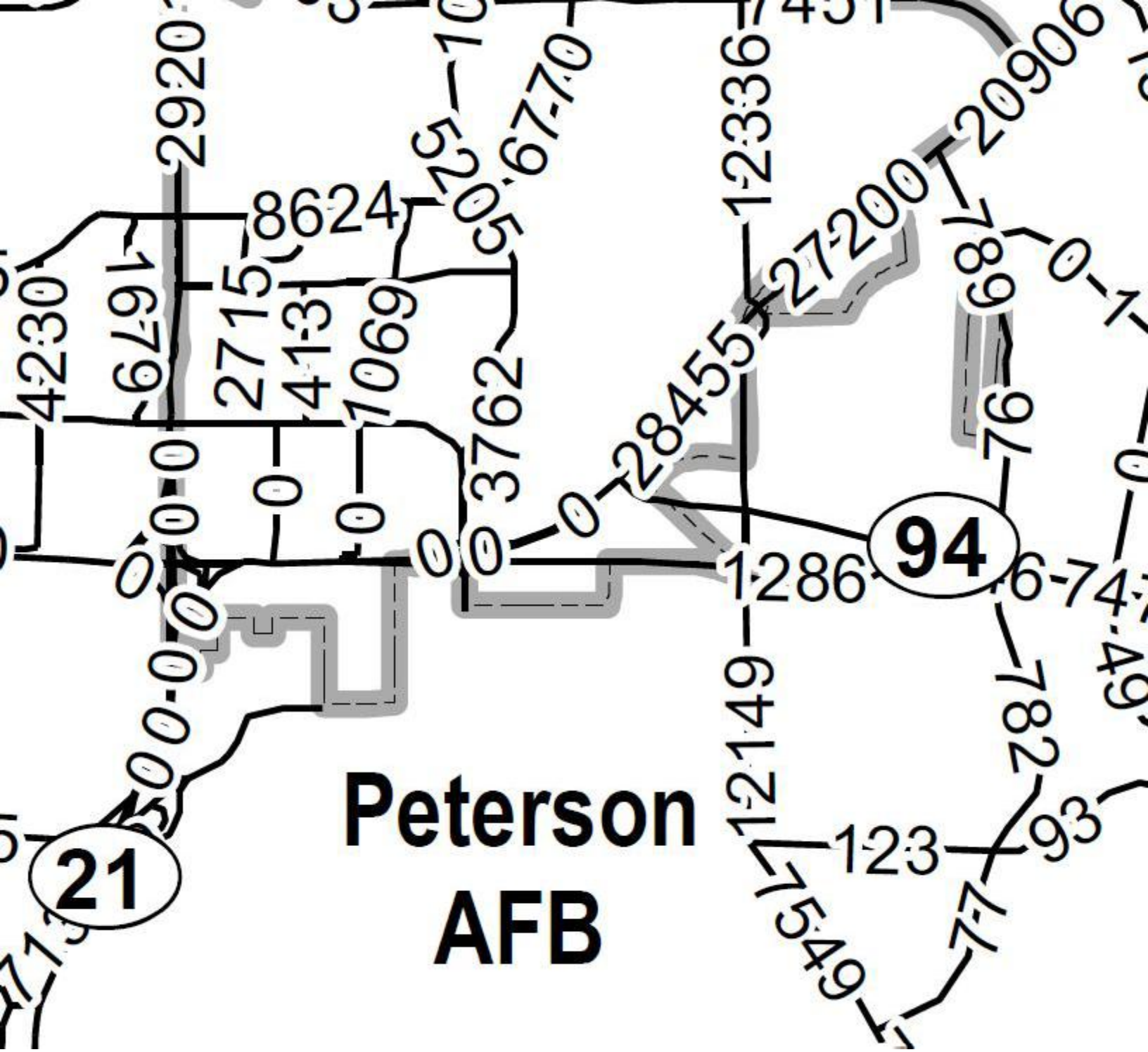
CDOT Annual Traffic Data

2040 PPACOG Traffic Model

Reagan Ranch Traffic Projection

ROUTE	REFPT	ENDREFPT	LENGTH	YR20FACTOR	DHV	LOCATION
094A	0.548	1	0.47	1.33	13.5	ON SH 94 E/O MARKSHEFFEL RD COLORADO SPRINGS
094A	1	8.085	7.077	1.25	12.5	ON SH 94 E/O SPACE VILLAGE AVE CR 2804

Station ID	2018 AADT	2040 AADT	Growth Factor	Yearly Growth Rate
103943	10000	13630	1.33	1.30%
103944	11000	14025	1.25	1.02%
		Avg Growth Rate		1.16%



2040 PPACOG MODEL

APPENDIX C

Trip Generation Worksheets

Crossroads North Phase 1 Trip Generation Summary

Use	Quantity	Daily	Weekday Vehicle Trips					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Crossroads North								
Public Park (ITE 411)	20 Acres	16	0	0	0	1	1	2
Tire Superstore (ITE 849)	7,000 SF	144	6	3	9	7	8	15
Home Improvement Superstore (ITE 862)	127,000 SF	3,904	113	86	199	145	151	296
Furniture Store (ITE 890)	114,000 SF	720	21	9	30	28	31	59
Sit Down Restaurant (ITE 932)	11,000 SF	1,234	60	49	109	66	41	107
Fast-Food Restaurant (ITE 934)	2,500 SF	1,178	51	49	100	43	39	82
Gas Station Super Convenience (ITE 960)	6,000 SF	5,026	249	250	499	208	208	416
Total Crossroads North Trips		12,222	500	446	946	498	479	977
Crossroads North Trips after Internal Capture		**11,246**	**490**	**437**	**927**	**458**	**441**	**899**

Crossroads North Full Buildout Trip Generation Summary

Use	Quantity	Daily	Weekday Vehicle Trips					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Crossroads North								
Public Park (ITE 411)	20 Acres	16	0	0	0	1	1	2
Movie Theatre (ITE 444)	52,000 SF	4,062	5	6	11	302	19	321
Tire Superstore (ITE 849)	7,000 SF	144	6	3	9	7	8	15
Home Improvement Superstore (ITE 862)	127,000 SF	3,904	113	86	199	145	151	296
Furniture Store (ITE 890)	114,000 SF	720	21	9	30	28	31	59
Sit Down Restaurant (ITE 932)	11,000 SF	1,234	60	49	109	66	41	107
Fast-Food Restaurant (ITE 934)	5,000 SF	2,356	103	98	201	85	78	163
Gas Station Super Convenience (ITE 960)	6,000 SF	5,026	249	250	499	208	208	416
Total Crossroads North Trips		17,462	557	501	1,058	842	537	1,379
Crossroads North Trips after Internal Capture		**16,066**	**546**	**491**	**1,037**	**775**	**494**	**1,269**

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North - Phase 1)				
Subject	Trip Generation - Public Park				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	1 *of* 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations
Land Use Code - Public Park (411)
Independant Variable - Acres (X)

Acres 20
X = 20
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (400 Series Page 3)

(T) = 0.02 (X)
(T) = 0.02 * (20.0)

Directional Distribution: 59% ent. 41% exit.
T = 0 Average Vehicle Trip Ends
0 entering 0 exiting
0 + 0 = 0

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (400 Series Page 4)

(T) = 0.11 (X)
(T) = 0.11 * (20.0)

Directional Distribution: 55% ent. 45% exit.
T = 2 Average Vehicle Trip Ends
1 entering 1 exiting
1 + 1 = 2

Weekday (400 Series page 2)

Average Weekday
T = 0.78* (X)
T = 0.78 * 20

Directional Distribution: 50% entering, 50% exiting
T = 16 Average Vehicle Trip Ends
8 entering 8 exiting

8 + 8 = 16

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for Tire Superstore				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Tire Superstore (849)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 7,000 Square Feet
X = 7.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 262)

Directional Distribution: 65% ent. 35% exit.
T = 1.34 (X)
T = 1.34 * 7.000
T = 9 Average Vehicle Trip Ends
6 entering 3 exiting

6 + 3 = 9

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 263)

Directional Distribution: 47% ent. 53% exit.
T = 2.11 (X)
T = 2.11 * 7.000
T = 15 Average Vehicle Trip Ends
7 entering 8 exiting

7 + 8 = 15

Weekday (800 Series Page 261)

Average Weekday
T = 20.37 (X)
T = 20.37* 7.000
Directional Distribution: 50% entering, 50% exiting
T = 144 Average Vehicle Trip Ends
72 entering 72 exiting

72 + 72 = 144

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for Home Improvements Superstore				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Home Improvement Superstore (862)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 127,000 Square Feet
X = 127.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 437)

Directional Distribution: 57% ent. 43% exit.
T = 1.57 (X)
T = 1.57 * 127.000
T = 199 Average Vehicle Trip Ends
113 entering 86 exiting

113 (*) · 86 = 199

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 438)

Directional Distribution: 49% ent. 51% exit.
T = 2.33 (X)
T = 2.33 * 127.000
T = 296 Average Vehicle Trip Ends
145 entering 151 exiting

145 + 151 = 296

Weekday (800 Series Page 436)

Average Weekday
T = 30.74 (X)
T = 30.74* 127.000
Directional Distribution: 50% entering, 50% exiting
T = 3904 Average Vehicle Trip Ends
1952 entering 1952 exiting

1952 + 1952 = 3904

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for Furniture Store				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rates

Land Use Code - Furniture Store (890)

Independent Variable - 1000 Square Feet (X)
SF = 114,000
X = 114.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 585)

Directional Distribution: 71% ent. 29% exit.
(T) = 0.26 (X) T = 30 Average Vehicle Trip Ends
(T) = 0.26 * (114.0) 21 entering 9 exiting

21 + 9 = 30

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 586)

Directional Distribution: 47% ent. 53% exit.
(T) = 0.52 (X) T = 59 Average Vehicle Trip Ends
(T) = 0.52 * (114.0) 28 entering 31 exiting

28 + 31 = 59

Weekday (800 Series Page 584)

Average Weekday Directional Distribution: 50% ent. 50% exit.
(T) = 6.30 (X) T = 720 Average Vehicle Trip Ends
(T) = 6.30 * (114.0) 360 entering 360 exiting

360 + 360 = 720

Saturday, Peak Hour of Generator (800 Series Page 590)

Daily Weekday Directional Distribution: 54% ent. 46% exit.
(T) = 1.10 (X) T = 125 Average Vehicle Trip Ends
(T) = 1.10 * (114.0) 68 entering 58 exiting

68 + 57 = 125

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for High-Turnover (Sit-Down) Restaurant				
Designed by	TES	*Date*	June 24, 2020	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations
Land Use Code - High Turnover Sit-Down Restaurant (932)
Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 11,000 Square Feet
X = 11.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 97)

Average Weekday — Directional Distribution: 55% ent. 45% exit.
T = 9.94 (X) — T = 109 Average Vehicle Trip Ends
T = 9.94 * 11.000 — 60 entering 49 exiting

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series Page 98)

Average Weekday — Directional Distribution: 62% ent. 38% exit.
T = 9.77 (X) — T = 107 Average Vehicle Trip Ends
T = 9.77 * 11.000 — 66 entering 41 exiting

Weekday (900 Series Page 96)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 112.18 (X) — T = 1234 Average Vehicle Trip Ends
T = 112.18 * 11.000 — 617 entering 617 exiting

P.M. Peak Hour of Generator (900 Series Page 100)

Average Weekday — Directional Distribution: 52% ent. 48% exit.
T = 17.41 (X) — T = 192 Average Vehicle Trip Ends
T = 17.41 * 11.000 — 100 entering 92 exiting

Saturday Peak Hour of Generator (900 Series Page 105

Average Saturday — Directional Distribution: 51% ent. 49% exit.
T = 11.19 (X) — T = 124 Average Vehicle Trip Ends
T = 11.19 * 11.000 — 63 entering 61 exiting

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017-Page 207)

AM Peak Hour = 57% Non-Pass By — PM Peak Hour = 57% Non-Pass By

	IN	Out	Total
AM Peak	34	28	62
PM Peak	38	23	61
Daily	352	352	704

PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017 -Page 207)

AM Peak Hour = 43% Pass By — PM Peak Hour = 43% Pass By

	IN	Out	Total
AM Peak	26	21	48
PM Peak	28	18	46
Daily	265	265	530

PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for Fast-Food Restaurant with Drive-Through Window				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Fast Food Restaurant With Drive-Through Window (934)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 2,500 Square Feet
X = 2.500
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series page 158)

Average Weekday — Directional Distribution: 51% ent. 49% exit.
T = 40.19 (X) — T = 100 Average Vehicle Trip Ends
T = 40.19 * 2.500 — 51 entering 49 exiting

51 + 49 = 100

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series page 159)

Average Weekday — Directional Distribution: 52% ent. 48% exit.
T = 32.67 (X) — T = 82 Average Vehicle Trip Ends
T = 32.67 * 2.500 — 43 entering 39 exiting

43 + 39 (*) = 82

Weekday (900 Series page 157)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 470.95 (X) — T = 1178 Average Vehicle Trip Ends
T = 470.95 * 2.500 — 589 entering 589 exiting

589 + 589 = 1178

Saturday Peak Hour of Generator (900 Series page 163)

Directional Distribution: 51% ent. 49% exit.
T = 54.86 (X) — T = 137 Average Vehicle Trip Ends
T = 54.86 * 2.500 — 70 entering 67 exiting

70 + 67 = 137

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour = 51% Non-Pass By — PM Peak Hour = 50% Non-Pass By

	IN	Out	Total	
AM Peak	26	25	51	
PM Peak	22	20	41	
Daily	295	295	590	PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour = 49% Pass By — PM Peak Hour = 50% Pass By

	IN	Out	Total	
AM Peak	25	24	49	
PM Peak	22	20	41	
Daily	294	294	588	PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North Phase 1)				
Subject	Trip Generation for Super Convenience Market/Gas Station				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Super Convenience Market/Gas Station (960)

Independant Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 6,000 Square Feet
X = 6.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 404)

T = 83.14 (X)
T = 83.14 * 6.000

Directional Distribution: 50% ent. 50% exit.
T = 499 Average Vehicle Trip Ends
249 entering 250 exiting

249 + 250 = 499

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series page 405)

T = 69.28 (X)
T = 69.28 * 6.000

Directional Distribution: 50% ent. 50% exit.
T = 416 Average Vehicle Trip Ends
208 entering 208 exiting

208 + 208 = 416

Weekday (800 Series page 335)

Average Weekday
T = 837.58 (X)
T = 837.58 * 6.000

Directional Distribution: 50% entering, 50% exiting
T = 5026 Average Vehicle Trip Ends
2513 entering 2513 exiting

2513 + 2513 = 5026

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

PM Peak Hour = 44% Non-Pass By
AM Peak Hour = 38% Non-Pass By
* Utilized ITE 945 pass-by calculations

	IN	Out	Total
AM Peak	95	95	190
PM Peak	92	92	183
Daily	1106	1106	2212

PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

PM Peak Hour = 56% Pass By
AM Peak Hour = 62% Pass By

	IN	Out	Total
AM Peak	154	155	309
PM Peak	116	116	233
Daily	1407	1407	2814

PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation - Public Park				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	1 *of* 1

TRIP GENERATION MANUAL TECHNIQUES

P

ITE Trip Generation Manual 10th Edition, Average Rate Equations
Land Use Code - Public Park (411)
Independant Variable - Acres (X)

Acres 20
X = 20
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (400 Series Page 3)

Directional Distribution: 59% ent. 41% exit.
(T) = 0.02 (X) T = 0 Average Vehicle Trip Ends
(T) = 0.02 * (20.0) 0 entering 0 exiting
0 + 0 = 0

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (400 Series Page 4)

Directional Distribution: 55% ent. 45% exit.
(T) = 0.11 (X) T = 2 Average Vehicle Trip Ends
(T) = 0.11 * (20.0) 1 entering 1 exiting
1 + 1 = 2

Weekday (400 Series page 2)

Average Weekday Directional Distribution: 50% entering, 50% exiting
T = 0.78* (X) T = 16 Average Vehicle Trip Ends
T = 0.78 * 20 8 entering 8 exiting

8 + 8 = 16

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Movie Theater				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Movie Theater (444)

Independent Variable - Gross Floor Area

Gross Floor Area = 52,000 Square Feet
X = 52.0
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (400 Series Page 111)

Directional Distribution: 50% ent. 50% exit.

T = 0.22 (X)
T = 0.22 * 52

T = 11 Average Vehicle Trip Ends
5 entering 6 exiting

5 (*) - 6 = 11

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (400 Series Page 112)

Directional Distribution: 94% ent. 6% exit.

T = 6.17 (X)
T = 6.17 * 52

T = 321 Average Vehicle Trip Ends
302 entering 19 exiting

302 + 19 = 321

Weekday (400 Series Page 110)

Average Weekday
T = 78.09 (X)
T = 78.09* 52

Directional Distribution: 50% entering, 50% exiting
T = 4062 Average Vehicle Trip Ends
2031 entering 2031 exiting

2031 + 2031 = 4062

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Tire Superstore				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Tire Superstore (849)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 7,000 Square Feet
X = 7.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 262)

Directional Distribution: 65% ent. 35% exit.
T = 1.34 (X)
T = 1.34 * 7.000
T = 9 Average Vehicle Trip Ends
6 entering 3 exiting

6 + 3 = 9

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 263)

Directional Distribution: 47% ent. 53% exit.
T = 2.11 (X)
T = 2.11 * 7.000
T = 15 Average Vehicle Trip Ends
7 entering 8 exiting

7 + 8 = 15

Weekday (800 Series Page 261)

Average Weekday
T = 20.37 (X)
T = 20.37* 7.000
Directional Distribution: 50% entering, 50% exiting
T = 144 Average Vehicle Trip Ends
72 entering 72 exiting

72 + 72 = 144

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Home Improvements Superstore				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Home Improvement Superstore (862)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 127,000 Square Feet
X = 127.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 437)

Directional Distribution: 57% ent. 43% exit.
T = 1.57 (X)
T = 1.57 * 127.000
T = 199 Average Vehicle Trip Ends
113 entering 86 exiting

113 (*) · 86 = 199

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 438)

Directional Distribution: 49% ent. 51% exit.
T = 2.33 (X)
T = 2.33 * 127.000
T = 296 Average Vehicle Trip Ends
145 entering 151 exiting

145 + 151 = 296

Weekday (800 Series Page 436)

Average Weekday
T = 30.74 (X)
T = 30.74* 127.000
Directional Distribution: 50% entering, 50% exiting
T = 3904 Average Vehicle Trip Ends
1952 entering 1952 exiting

1952 + 1952 = 3904

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Furniture Store				
Designed by	JRP	*Date* ###	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rates

Land Use Code - Furniture Store (890)

Independent Variable - 1000 Square Feet (X)
SF = 114,000
X = 114.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 585)

Directional Distribution: 71% ent. 29% exit.
(T) = 0.26 (X) T = 30 Average Vehicle Trip Ends
(T) = 0.26 * (114.0) 21 entering 9 exiting

21 + 9 = 30

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 586)

Directional Distribution: 47% ent. 53% exit.
(T) = 0.52 (X) T = 59 Average Vehicle Trip Ends
(T) = 0.52 * (114.0) 28 entering 31 exiting

28 + 31 = 59

Weekday (800 Series Page 584)

Average Weekday Directional Distribution: 50% ent. 50% exit.
(T) = 6.30 (X) T = 720 Average Vehicle Trip Ends
(T) = 6.30 * (114.0) 360 entering 360 exiting

360 + 360 = 720

Saturday, Peak Hour of Generator (800 Series Page 590)

Daily Weekday Directional Distribution: 54% ent. 46% exit.
(T) = 1.10 (X) T = 125 Average Vehicle Trip Ends
(T) = 1.10 * (114.0) 68 entering 58 exiting

68 + 57 = 125

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for High-Turnover (Sit-Down) Restaurant				
Designed by	TES	*Date*	June 24, 2020	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations
Land Use Code - High Turnover Sit-Down Restaurant (932)
Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 11,000 Square Feet
X = 11.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 97)

Average Weekday — Directional Distribution: 55% ent. 45% exit.
T = 9.94 (X) — T = 109 Average Vehicle Trip Ends
T = 9.94 * 11.000 — 60 entering 49 exiting

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series Page 98)

Average Weekday — Directional Distribution: 62% ent. 38% exit.
T = 9.77 (X) — T = 107 Average Vehicle Trip Ends
T = 9.77 * 11.000 — 66 entering 41 exiting

Weekday (900 Series Page 96)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 112.18 (X) — T = 1234 Average Vehicle Trip Ends
T = 112.18 * 11.000 — 617 entering 617 exiting

P.M. Peak Hour of Generator (900 Series Page 100)

Average Weekday — Directional Distribution: 52% ent. 48% exit.
T = 17.41 (X) — T = 192 Average Vehicle Trip Ends
T = 17.41 * 11.000 — 100 entering 92 exiting

Saturday Peak Hour of Generator (900 Series Page 105

Average Saturday — Directional Distribution: 51% ent. 49% exit.
T = 11.19 (X) — T = 124 Average Vehicle Trip Ends
T = 11.19 * 11.000 — 63 entering 61 exiting

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017-Page 207)

AM Peak Hour = 57% Non-Pass By — PM Peak Hour = 57% Non-Pass By

	IN	Out	Total
AM Peak	34	28	62
PM Peak	38	23	61
Daily	352	352	704

PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017 -Page 207)

AM Peak Hour = 43% Pass By — PM Peak Hour = 43% Pass By

	IN	Out	Total
AM Peak	26	21	48
PM Peak	28	18	46
Daily	265	265	530

PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Fast-Food Restaurant with Drive-Through Window				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Fast Food Restaurant With Drive-Through Window (934)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 5,000 Square Feet
X = 5.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series page 158)

Average Weekday — Directional Distribution: 51% ent. 49% exit.
T = 40.19 (X) — T = 201 Average Vehicle Trip Ends
T = 40.19 * 5.000 — 103 entering 98 exiting

103 + 98 (*) = 201

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series page 159)

Average Weekday — Directional Distribution: 52% ent. 48% exit.
T = 32.67 (X) — T = 163 Average Vehicle Trip Ends
T = 32.67 * 5.000 — 85 entering 78 exiting

85 + 78 = 163

Weekday (900 Series page 157)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 470.95 (X) — T = 2356 Average Vehicle Trip Ends
T = 470.95 * 5.000 — 1178 entering 1178 exiting

1178 + 1178 = 2356

Saturday Peak Hour of Generator (900 Series page 163)

Directional Distribution: 51% ent. 49% exit.
T = 54.86 (X) — T = 274 Average Vehicle Trip Ends
T = 54.86 * 5.000 — 140 entering 134 exiting

140 + 134 = 274

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour = 51% Non-Pass By — PM Peak Hour = 50% Non-Pass By

	IN	Out	Total
AM Peak	53	50	103
PM Peak	43	39	82
Daily	589	589	1178

PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour = 49% Pass By — PM Peak Hour = 50% Pass By

	IN	Out	Total
AM Peak	50	48	98
PM Peak	43	39	82
Daily	589	589	1178

PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Crossroads-Meadowbrook-Reagan Ranch (Crossroads North)				
Subject	Trip Generation for Super Convenience Market/Gas Station				
Designed by	JRP	*Date*	February 08, 2021	*Job No.*	096956015
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Super Convenience Market/Gas Station (960)

Independant Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 6,000 Square Feet
X = 6.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 404)

T = 83.14 (X)
T = 83.14 * 6.000

Directional Distribution: 50% ent. 50% exit.
T = 499 Average Vehicle Trip Ends
249 entering 250 exiting

249 + 250 = 499

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series page 405)

T = 69.28 (X)
T = 69.28 * 6.000

Directional Distribution: 50% ent. 50% exit.
T = 416 Average Vehicle Trip Ends
208 entering 208 exiting

208 + 208 = 416

Weekday (800 Series page 335)

Average Weekday
T = 837.58 (X)
T = 837.58 * 6.000

Directional Distribution: 50% entering, 50% exiting
T = 5026 Average Vehicle Trip Ends
2513 entering 2513 exiting

2513 + 2513 = 5026

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

PM Peak Hour = 44% Non-Pass By
AM Peak Hour = 38% Non-Pass By
* Utilized ITE 945 pass-by calculations

	IN	Out	Total
AM Peak	95	95	190
PM Peak	92	92	183
Daily	1106	1106	2212

PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

PM Peak Hour = 56% Pass By
AM Peak Hour = 62% Pass By

	IN	Out	Total
AM Peak	154	155	309
PM Peak	116	116	233
Daily	1407	1407	2814

PM Peak Hour Rate Applied to Daily

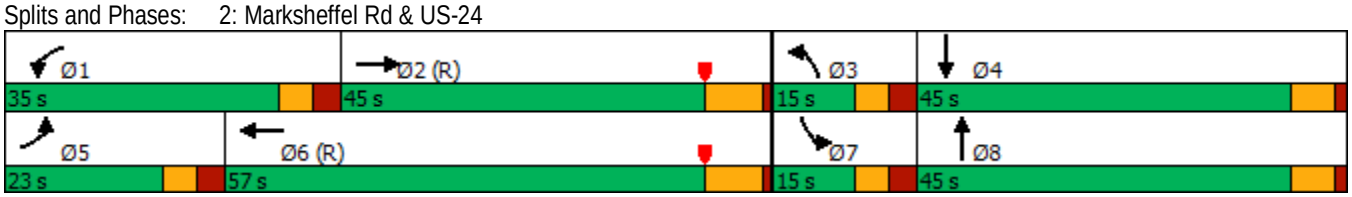
APPENDIX D

Intersection Analysis Worksheets

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	335	486	282	1107	18	1	454	54	9	707	705
Future Volume (vph)	335	486	282	1107	18	1	454	54	9	707	705
Turn Type	Prot	NA	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					Free			Free			Free
Detector Phase	5	2	1	6		3	8		7	4	
Switch Phase											
Minimum Initial (s)	6.0	20.0	6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0	12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	23.0	45.0	35.0	57.0		15.0	45.0		15.0	45.0	
Total Split (%)	16.4%	32.1%	25.0%	40.7%		10.7%	32.1%		10.7%	32.1%	
Yellow Time (s)	3.5	6.0	3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0	3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0	6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	21.6	66.2	16.6	61.2	140.0	4.7	35.0	140.0	5.6	35.4	140.0
Actuated g/C Ratio	0.15	0.47	0.12	0.44	1.00	0.03	0.25	1.00	0.04	0.25	1.00
v/c Ratio	0.72	0.33	0.74	0.76	0.01	0.02	0.54	0.04	0.13	0.86	0.48
Control Delay	78.3	19.7	70.7	38.6	0.0	68.0	66.6	0.0	68.9	60.1	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.3	19.7	70.7	38.6	0.0	68.0	66.6	0.0	68.9	60.1	1.1
LOS	E	B	E	D	A	E	E	A	E	E	A
Approach Delay		43.6		44.5			59.6			30.9	
Approach LOS		D		D			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 110 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 41.5	Intersection LOS: D
Intersection Capacity Utilization 76.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	486	0	282	1107	18	1	454	54	9	707	705
Future Volume (veh/h)	335	486	0	282	1107	18	1	454	54	9	707	705
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	349	506	0	294	1153	0	1	473	0	9	736	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	378	1560		349	1600		2	806		18	819	
Arrive On Green	0.12	0.47	0.00	0.10	0.46	0.00	0.00	0.23	0.00	0.01	0.24	0.00
Sat Flow, veh/h	3209	3300	1472	3401	3497	1560	1767	3526	1572	1725	3441	1535
Grp Volume(v), veh/h	349	506	0	294	1153	0	1	473	0	9	736	0
Grp Sat Flow(s),veh/h/ln	1605	1650	1472	1700	1749	1560	1767	1763	1572	1725	1721	1535
Q Serve(g_s), s	15.1	13.4	0.0	11.9	37.4	0.0	0.1	16.7	0.0	0.7	29.0	0.0
Cycle Q Clear(g_c), s	15.1	13.4	0.0	11.9	37.4	0.0	0.1	16.7	0.0	0.7	29.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	1560		349	1600		2	806		18	819	
V/C Ratio(X)	0.92	0.32		0.84	0.72		0.52	0.59		0.49	0.90	
Avail Cap(c_a), veh/h	378	1560		692	1600		107	982		105	959	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.84	0.84	0.00
Uniform Delay (d), s/veh	61.1	23.0	0.0	61.7	30.8	0.0	69.9	48.1	0.0	68.9	51.7	0.0
Incr Delay (d2), s/veh	28.6	0.6	0.0	2.1	2.8	0.0	62.8	0.3	0.0	6.4	8.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	5.4	0.0	5.3	16.3	0.0	0.1	7.4	0.0	0.4	13.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.7	23.6	0.0	63.8	33.6	0.0	132.7	48.4	0.0	75.2	59.7	0.0
LnGrp LOS	F	C		E	C		F	D		E	E	
Approach Vol, veh/h		855			1447			474			745	
Approach Delay, s/veh		50.6			39.7			48.5			59.9	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	73.2	6.7	39.3	23.0	71.0	8.0	38.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	28.5	38.0	8.5	39.0	16.5	50.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	13.9	15.4	2.1	31.0	17.1	39.4	2.7	18.7
Green Ext Time (p_c), s	0.5	2.3	0.0	2.3	0.0	4.4	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

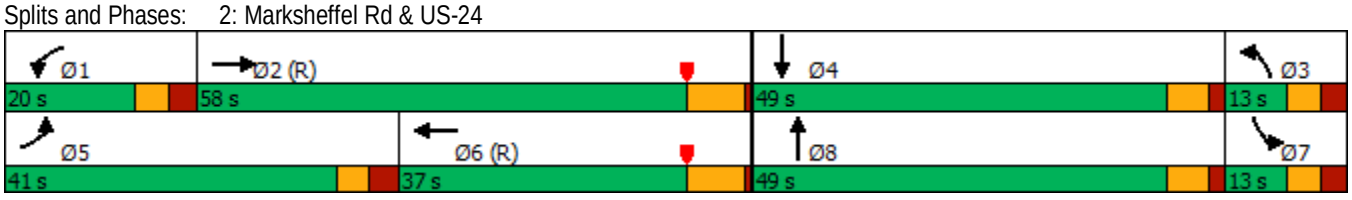
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	622	1100	7	140	525	15	12	830	178	16	554	473
Future Volume (vph)	622	1100	7	140	525	15	12	830	178	16	554	473
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	27.5		10.5	12.5		11.5	12.0	
Total Split (s)	41.0	58.0		20.0	37.0		13.0	49.0		13.0	49.0	
Total Split (%)	29.3%	41.4%		14.3%	26.4%		9.3%	35.0%		9.3%	35.0%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	32.3	66.6	140.0	10.3	44.5	140.0	9.6	38.4	140.0	5.8	34.3	140.0
Actuated g/C Ratio	0.23	0.48	1.00	0.07	0.32	1.00	0.07	0.27	1.00	0.04	0.24	1.00
v/c Ratio	0.80	0.67	0.00	0.57	0.48	0.01	0.10	0.87	0.11	0.22	0.66	0.31
Control Delay	45.0	51.3	0.0	71.6	43.1	0.0	67.0	83.1	0.1	72.1	51.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	51.3	0.0	71.6	43.1	0.0	67.0	83.1	0.1	72.1	51.8	0.5
LOS	D	D	A	E	D	A	E	F	A	E	D	A
Approach Delay		48.8			48.1			68.4			28.8	
Approach LOS		D			D			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 48.5	Intersection LOS: D
Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	622	1100	7	140	525	15	12	830	178	16	554	473
Future Volume (veh/h)	622	1100	7	140	525	15	12	830	178	16	554	473
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	635	1122	0	143	536	0	12	847	0	16	565	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	735	1696		192	1130		167	940		29	660	
Arrive On Green	0.21	0.48	0.00	0.06	0.32	0.00	0.09	0.26	0.00	0.02	0.19	0.00
Sat Flow, veh/h	3456	3554	1585	3428	3526	1572	1781	3554	1585	1767	3526	1572
Grp Volume(v), veh/h	635	1122	0	143	536	0	12	847	0	16	565	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1714	1763	1572	1781	1777	1585	1767	1763	1572
Q Serve(g_s), s	24.8	33.8	0.0	5.8	17.1	0.0	0.9	32.2	0.0	1.3	21.7	0.0
Cycle Q Clear(g_c), s	24.8	33.8	0.0	5.8	17.1	0.0	0.9	32.2	0.0	1.3	21.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	735	1696		192	1130		167	940		29	660	
V/C Ratio(X)	0.86	0.66		0.75	0.47		0.07	0.90		0.55	0.86	
Avail Cap(c_a), veh/h	852	1696		331	1130		167	1091		82	1083	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	53.2	28.0	0.0	65.1	38.1	0.0	57.9	49.7	0.0	68.3	55.1	0.0
Incr Delay (d2), s/veh	9.8	2.0	0.0	2.2	1.4	0.0	0.1	8.6	0.0	5.5	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	14.8	0.0	2.6	7.7	0.0	0.4	15.4	0.0	0.6	9.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	30.0	0.0	67.3	39.5	0.0	57.9	58.3	0.0	73.8	56.8	0.0
LnGrp LOS	E	C		E	D		E	E		E	E	
Approach Vol, veh/h		1757			679			859			581	
Approach Delay, s/veh		41.9			45.4			58.3			57.3	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	73.8	19.6	32.2	36.3	51.9	8.8	43.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	13.5	51.0	6.5	43.0	34.5	30.0	6.5	43.0
Max Q Clear Time (g_c+I1), s	7.8	35.8	2.9	23.7	26.8	19.1	3.3	34.2
Green Ext Time (p_c), s	0.1	5.2	0.0	2.5	2.9	1.9	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

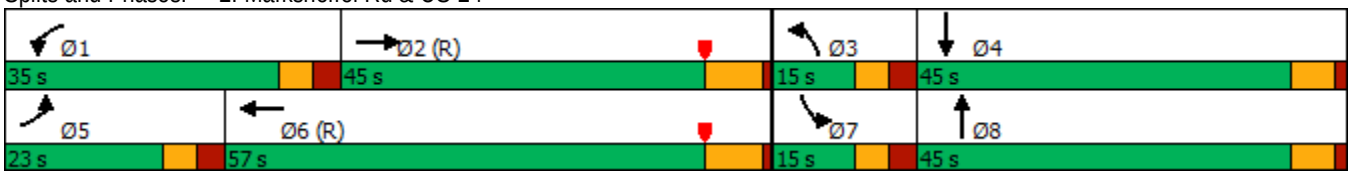
Notes

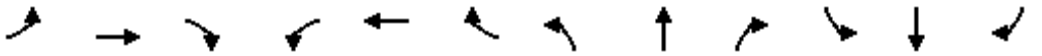
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	360	550	325	1215	20	5	625	85	10	875	760
Future Volume (vph)	360	550	325	1215	20	5	625	85	10	875	760
Turn Type	Prot	NA	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					Free			Free			Free
Detector Phase	5	2	1	6		3	8		7	4	
Switch Phase											
Minimum Initial (s)	6.0	20.0	6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0	12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	23.0	45.0	35.0	57.0		15.0	45.0		15.0	45.0	
Total Split (%)	16.4%	32.1%	25.0%	40.7%		10.7%	32.1%		10.7%	32.1%	
Yellow Time (s)	3.5	6.0	3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0	3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0	6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	23.2	56.9	18.5	52.2	140.0	5.0	42.5	140.0	5.6	42.7	140.0
Actuated g/C Ratio	0.17	0.41	0.13	0.37	1.00	0.04	0.30	1.00	0.04	0.30	1.00
v/c Ratio	0.72	0.43	0.77	0.98	0.01	0.08	0.61	0.06	0.15	0.88	0.52
Control Delay	81.0	23.8	70.1	63.9	0.0	57.2	63.8	0.1	69.2	56.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.0	23.8	70.1	63.9	0.0	57.2	63.8	0.1	69.2	56.6	1.3
LOS	F	C	E	E	A	E	E	A	E	E	A
Approach Delay		46.4		64.4			56.1			31.1	
Approach LOS		D		E			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 110 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 48.5	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	550	0	325	1215	20	5	625	85	10	875	760
Future Volume (veh/h)	360	550	0	325	1215	20	5	625	85	10	875	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	375	573	0	339	1266	0	5	651	0	10	911	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	378	1374		395	1450		9	953		20	952	
Arrive On Green	0.12	0.42	0.00	0.12	0.41	0.00	0.01	0.27	0.00	0.01	0.28	0.00
Sat Flow, veh/h	3209	3300	1472	3401	3497	1560	1767	3526	1572	1725	3441	1535
Grp Volume(v), veh/h	375	573	0	339	1266	0	5	651	0	10	911	0
Grp Sat Flow(s),veh/h/ln	1605	1650	1472	1700	1749	1560	1767	1763	1572	1725	1721	1535
Q Serve(g_s), s	16.3	17.2	0.0	13.7	46.5	0.0	0.4	23.1	0.0	0.8	36.5	0.0
Cycle Q Clear(g_c), s	16.3	17.2	0.0	13.7	46.5	0.0	0.4	23.1	0.0	0.8	36.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	1374		395	1450		9	953		20	952	
V/C Ratio(X)	0.99	0.42		0.86	0.87		0.56	0.68		0.50	0.96	
Avail Cap(c_a), veh/h	378	1374		692	1450		107	982		105	959	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.74	0.74	0.00
Uniform Delay (d), s/veh	61.7	28.8	0.0	60.8	37.6	0.0	69.5	45.7	0.0	68.8	49.8	0.0
Incr Delay (d2), s/veh	44.0	0.9	0.0	2.2	7.5	0.0	18.8	1.5	0.0	5.3	15.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	7.0	0.0	6.0	21.2	0.0	0.2	10.4	0.0	0.4	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.7	29.8	0.0	62.9	45.1	0.0	88.3	47.2	0.0	74.1	65.4	0.0
LnGrp LOS	F	C		E	D		F	D		E	E	
Approach Vol, veh/h		948			1605			656			921	
Approach Delay, s/veh		59.8			48.9			47.6			65.5	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.7	65.3	7.2	44.7	23.0	65.1	8.1	43.8
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	28.5	38.0	8.5	39.0	16.5	50.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	15.7	19.2	2.4	38.5	18.3	48.5	2.8	25.1
Green Ext Time (p_c), s	0.5	2.6	0.0	0.3	0.0	1.0	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

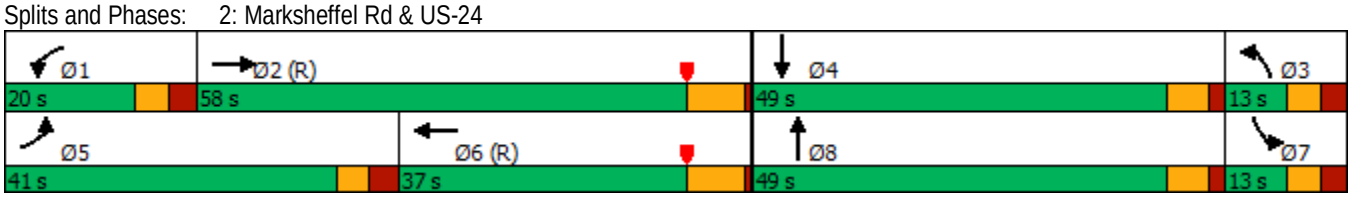
Notes

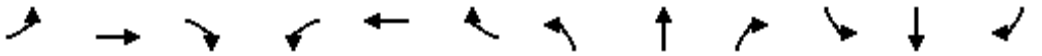
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	670	1200	10	190	585	20	15	1060	225	20	780	510
Future Volume (vph)	670	1200	10	190	585	20	15	1060	225	20	780	510
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	27.5		10.5	12.5		11.5	12.0	
Total Split (s)	41.0	58.0		20.0	37.0		13.0	49.0		13.0	49.0	
Total Split (%)	29.3%	41.4%		14.3%	26.4%		9.3%	35.0%		9.3%	35.0%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	33.2	58.1	140.0	11.7	36.6	140.0	6.1	43.0	140.0	5.8	45.0	140.0
Actuated g/C Ratio	0.24	0.42	1.00	0.08	0.26	1.00	0.04	0.31	1.00	0.04	0.32	1.00
v/c Ratio	0.84	0.83	0.01	0.68	0.65	0.01	0.20	1.00	0.15	0.28	0.71	0.33
Control Delay	44.3	65.3	0.0	74.6	51.6	0.0	76.6	86.7	0.1	74.3	46.0	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	65.3	0.0	74.6	51.6	0.0	76.6	86.7	0.1	74.3	46.0	0.6
LOS	D	E	A	E	D	A	E	F	A	E	D	A
Approach Delay		57.4			55.9			71.5			28.8	
Approach LOS		E			E			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 53.6	Intersection LOS: D
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	1200	10	190	585	20	15	1060	225	20	780	510
Future Volume (veh/h)	670	1200	10	190	585	20	15	1060	225	20	780	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	684	1224	0	194	597	0	15	1082	0	20	796	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	773	1482		243	931		131	1091		34	892	
Arrive On Green	0.22	0.42	0.00	0.07	0.26	0.00	0.07	0.31	0.00	0.02	0.25	0.00
Sat Flow, veh/h	3456	3554	1585	3428	3526	1572	1781	3554	1585	1767	3526	1572
Grp Volume(v), veh/h	684	1224	0	194	597	0	15	1082	0	20	796	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1714	1763	1572	1781	1777	1585	1767	1763	1572
Q Serve(g_s), s	26.8	42.9	0.0	7.8	21.0	0.0	1.1	42.5	0.0	1.6	30.5	0.0
Cycle Q Clear(g_c), s	26.8	42.9	0.0	7.8	21.0	0.0	1.1	42.5	0.0	1.6	30.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	773	1482		243	931		131	1091		34	892	
V/C Ratio(X)	0.88	0.83		0.80	0.64		0.11	0.99		0.59	0.89	
Avail Cap(c_a), veh/h	852	1482		331	931		131	1091		82	1083	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	52.6	36.3	0.0	64.1	45.6	0.0	60.6	48.3	0.0	68.1	50.5	0.0
Incr Delay (d2), s/veh	11.5	5.4	0.0	6.6	3.4	0.0	0.1	25.0	0.0	5.1	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	19.6	0.0	3.6	9.7	0.0	0.5	22.5	0.0	0.8	14.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	41.7	0.0	70.6	49.0	0.0	60.7	73.3	0.0	73.2	57.1	0.0
LnGrp LOS	E	D		E	D		E	E		E	E	
Approach Vol, veh/h		1908			791			1097			816	
Approach Delay, s/veh		49.7			54.3			73.2			57.5	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	65.4	16.8	41.4	37.8	44.0	9.2	49.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	13.5	51.0	6.5	43.0	34.5	30.0	6.5	43.0
Max Q Clear Time (g_c+I1), s	9.8	44.9	3.1	32.5	28.8	23.0	3.6	44.5
Green Ext Time (p_c), s	0.1	3.2	0.0	2.9	2.5	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	57.5
HCM 6th LOS	E

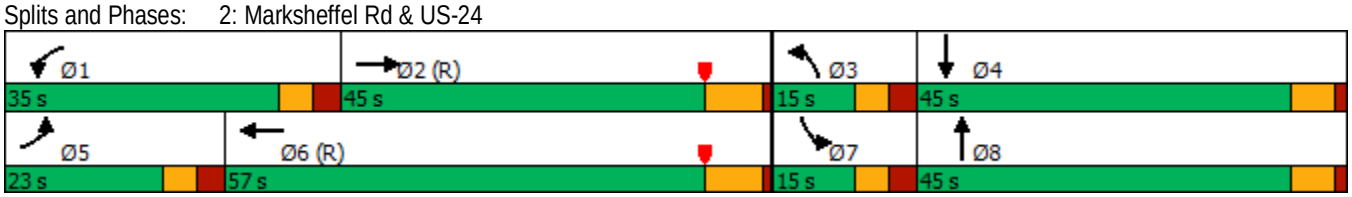
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	550	125	350	1215	20	5	755	105	10	1025	760
Future Volume (vph)	360	550	125	350	1215	20	5	755	105	10	1025	760
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0		12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	23.0	45.0		35.0	57.0		15.0	45.0		15.0	45.0	
Total Split (%)	16.4%	32.1%		25.0%	40.7%		10.7%	32.1%		10.7%	32.1%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	16.5	47.0	140.0	19.5	50.0	140.0	5.0	51.3	140.0	5.6	51.5	140.0
Actuated g/C Ratio	0.12	0.34	1.00	0.14	0.36	1.00	0.04	0.37	1.00	0.04	0.37	1.00
v/c Ratio	1.01	0.53	0.09	0.78	1.02	0.01	0.08	0.61	0.07	0.15	0.85	0.52
Control Delay	125.6	29.4	0.1	69.7	75.3	0.0	60.6	43.6	0.1	69.2	48.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.6	29.4	0.1	69.7	75.3	0.0	60.6	43.6	0.1	69.2	48.6	1.3
LOS	F	C	A	E	E	A	E	D	A	E	D	A
Approach Delay		59.4			73.1			38.4			28.7	
Approach LOS		E			E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 110 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 49.6	Intersection LOS: D
Intersection Capacity Utilization 88.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	550	125	350	1215	20	5	755	105	10	1025	760
Future Volume (veh/h)	360	550	125	350	1215	20	5	755	105	10	1025	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	375	573	0	365	1266	0	5	786	0	10	1068	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	378	1343		421	1444		9	959		20	959	
Arrive On Green	0.12	0.41	0.00	0.12	0.41	0.00	0.01	0.27	0.00	0.01	0.28	0.00
Sat Flow, veh/h	3209	3300	1472	3401	3497	1560	1767	3526	1572	1725	3441	1535
Grp Volume(v), veh/h	375	573	0	365	1266	0	5	786	0	10	1068	0
Grp Sat Flow(s),veh/h/ln	1605	1650	1472	1700	1749	1560	1767	1763	1572	1725	1721	1535
Q Serve(g_s), s	16.3	17.4	0.0	14.7	46.6	0.0	0.4	29.2	0.0	0.8	39.0	0.0
Cycle Q Clear(g_c), s	16.3	17.4	0.0	14.7	46.6	0.0	0.4	29.2	0.0	0.8	39.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	1343		421	1444		9	959		20	959	
V/C Ratio(X)	0.99	0.43		0.87	0.88		0.56	0.82		0.50	1.11	
Avail Cap(c_a), veh/h	378	1343		692	1444		107	982		105	959	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	61.7	29.8	0.0	60.2	37.8	0.0	69.5	47.7	0.0	68.8	50.5	0.0
Incr Delay (d2), s/veh	44.0	1.0	0.0	3.4	7.8	0.0	18.8	5.1	0.0	4.8	61.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	7.2	0.0	6.6	21.4	0.0	0.2	13.5	0.0	0.4	24.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.7	30.8	0.0	63.6	45.6	0.0	88.3	52.8	0.0	73.6	112.1	0.0
LnGrp LOS	F	C		E	D		F	D		E	F	
Approach Vol, veh/h		948			1631			791			1078	
Approach Delay, s/veh		60.4			49.6			53.0			111.7	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	64.0	7.2	45.0	23.0	64.8	8.1	44.1
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	28.5	38.0	8.5	39.0	16.5	50.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	16.7	19.4	2.4	41.0	18.3	48.6	2.8	31.2
Green Ext Time (p_c), s	0.6	2.6	0.0	0.0	0.0	0.9	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	67.6
HCM 6th LOS	E

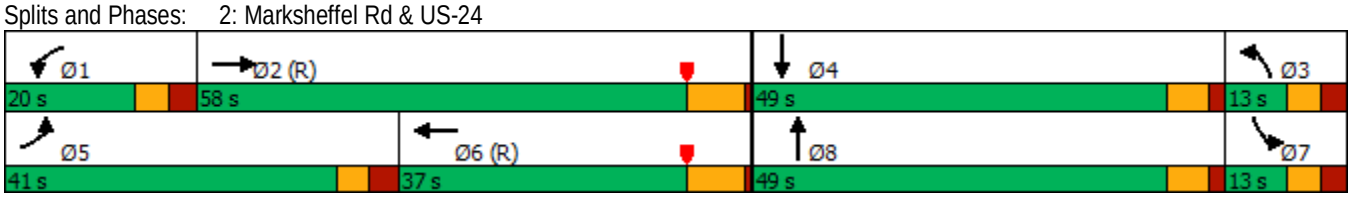
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	670	1200	125	210	585	20	15	1190	245	20	915	510
Future Volume (vph)	670	1200	125	210	585	20	15	1190	245	20	915	510
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	27.5		10.5	12.5		11.5	12.0	
Total Split (s)	41.0	58.0		20.0	37.0		13.0	49.0		13.0	49.0	
Total Split (%)	29.3%	41.4%		14.3%	26.4%		9.3%	35.0%		9.3%	35.0%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	33.2	57.6	140.0	12.2	36.6	140.0	5.6	43.0	140.0	5.8	45.5	140.0
Actuated g/C Ratio	0.24	0.41	1.00	0.09	0.26	1.00	0.04	0.31	1.00	0.04	0.32	1.00
v/c Ratio	0.84	0.84	0.08	0.72	0.65	0.01	0.21	1.12	0.16	0.28	0.82	0.33
Control Delay	42.3	64.4	0.0	76.5	51.6	0.0	74.2	117.7	0.1	74.3	50.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	64.4	0.0	76.5	51.6	0.0	74.2	117.7	0.1	74.3	50.6	0.6
LOS	D	E	A	E	D	A	E	F	A	E	D	A
Approach Delay		52.9			56.8			97.4			33.3	
Approach LOS		D			E			F			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 59.8	Intersection LOS: E
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	1200	125	210	585	20	15	1190	245	20	915	510
Future Volume (veh/h)	670	1200	125	210	585	20	15	1190	245	20	915	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	684	1224	0	214	597	0	15	1214	0	20	934	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	773	1462		262	931		71	1091		34	1010	
Arrive On Green	0.22	0.41	0.00	0.08	0.26	0.00	0.04	0.31	0.00	0.02	0.29	0.00
Sat Flow, veh/h	3456	3554	1585	3428	3526	1572	1781	3554	1585	1767	3526	1572
Grp Volume(v), veh/h	684	1224	0	214	597	0	15	1214	0	20	934	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1714	1763	1572	1781	1777	1585	1767	1763	1572
Q Serve(g_s), s	26.8	43.3	0.0	8.6	21.0	0.0	1.1	43.0	0.0	1.6	36.0	0.0
Cycle Q Clear(g_c), s	26.8	43.3	0.0	8.6	21.0	0.0	1.1	43.0	0.0	1.6	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	773	1462		262	931		71	1091		34	1010	
V/C Ratio(X)	0.88	0.84		0.82	0.64		0.21	1.11		0.59	0.92	
Avail Cap(c_a), veh/h	852	1462		331	931		83	1091		82	1083	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.84	0.84	0.00
Uniform Delay (d), s/veh	52.6	37.0	0.0	63.7	45.6	0.0	65.1	48.5	0.0	68.1	48.5	0.0
Incr Delay (d2), s/veh	11.5	5.9	0.0	9.5	3.4	0.0	0.5	63.5	0.0	4.9	10.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	19.9	0.0	4.1	9.7	0.0	0.5	28.6	0.0	0.8	17.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	42.9	0.0	73.2	49.0	0.0	65.6	112.0	0.0	73.0	58.9	0.0
LnGrp LOS	E	D		E	D		E	F		E	E	
Approach Vol, veh/h		1908			811			1229			954	
Approach Delay, s/veh		50.5			55.4			111.4			59.2	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	64.6	12.1	46.1	37.8	44.0	9.2	49.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	13.5	51.0	6.5	43.0	34.5	30.0	6.5	43.0
Max Q Clear Time (g_c+I1), s	10.6	45.3	3.1	38.0	28.8	23.0	3.6	45.0
Green Ext Time (p_c), s	0.1	3.1	0.0	2.1	2.5	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	68.3
HCM 6th LOS	E

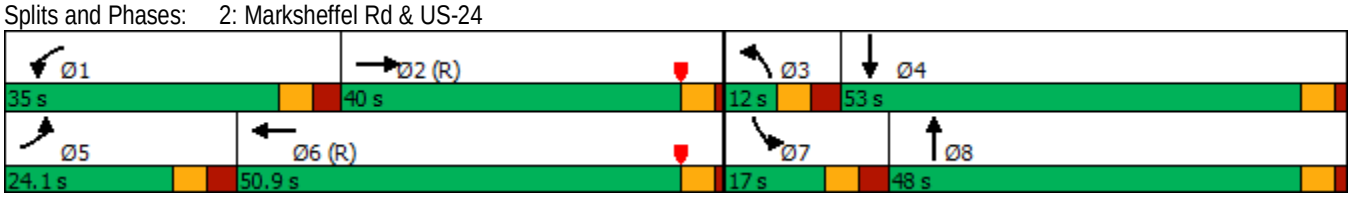
Notes

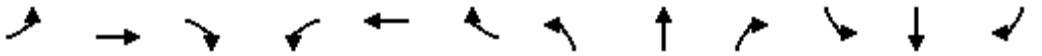
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	550	125	350	1215	20	5	755	105	10	1025	760
Future Volume (vph)	360	550	125	350	1215	20	5	755	105	10	1025	760
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0		12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	24.1	40.0		35.0	50.9		12.0	48.0		17.0	53.0	
Total Split (%)	17.2%	28.6%		25.0%	36.4%		8.6%	34.3%		12.1%	37.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	4.5		6.5	4.5		6.5	5.0		6.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	22.4	53.6	140.0	19.5	50.8	140.0	4.9	48.1	140.0	5.6	48.4	140.0
Actuated g/C Ratio	0.16	0.38	1.00	0.14	0.36	1.00	0.04	0.34	1.00	0.04	0.35	1.00
v/c Ratio	0.74	0.46	0.09	0.78	1.01	0.01	0.08	0.65	0.07	0.15	0.91	0.52
Control Delay	88.4	25.8	0.1	69.7	71.2	0.0	66.0	45.4	0.1	69.2	55.2	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.4	25.8	0.1	69.7	71.2	0.0	66.0	45.4	0.1	69.2	55.2	1.3
LOS	F	C	A	E	E	A	E	D	A	E	E	A
Approach Delay		44.5			70.0			40.1			32.4	
Approach LOS		D			E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 112.5 (80%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 47.3	Intersection LOS: D
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	550	125	350	1215	20	5	755	105	10	1025	760
Future Volume (veh/h)	360	550	125	350	1215	20	5	755	105	10	1025	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	375	573	0	365	1266	0	5	786	0	10	1068	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	403	1256		421	1325		9	1140		20	1135	
Arrive On Green	0.13	0.38	0.00	0.12	0.38	0.00	0.01	0.32	0.00	0.01	0.33	0.00
Sat Flow, veh/h	3209	3300	1472	3401	3497	1560	1767	3526	1572	1725	3441	1535
Grp Volume(v), veh/h	375	573	0	365	1266	0	5	786	0	10	1068	0
Grp Sat Flow(s),veh/h/ln	1605	1650	1472	1700	1749	1560	1767	1763	1572	1725	1721	1535
Q Serve(g_s), s	16.2	18.2	0.0	14.7	49.3	0.0	0.4	27.2	0.0	0.8	42.2	0.0
Cycle Q Clear(g_c), s	16.2	18.2	0.0	14.7	49.3	0.0	0.4	27.2	0.0	0.8	42.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	1256		421	1325		9	1140		20	1135	
V/C Ratio(X)	0.93	0.46		0.87	0.96		0.56	0.69		0.50	0.94	
Avail Cap(c_a), veh/h	403	1256		692	1325		69	1140		129	1180	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	60.6	32.5	0.0	60.2	42.3	0.0	69.5	41.2	0.0	68.8	45.6	0.0
Incr Delay (d2), s/veh	28.6	1.2	0.0	3.4	16.2	0.0	18.8	1.5	0.0	4.8	10.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	7.6	0.0	6.6	24.1	0.0	0.2	12.1	0.0	0.4	19.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.2	33.7	0.0	63.6	58.5	0.0	88.3	42.7	0.0	73.6	55.7	0.0
LnGrp LOS	F	C		E	E		F	D		E	E	
Approach Vol, veh/h		948			1631			791			1078	
Approach Delay, s/veh		55.6			59.7			43.0			55.9	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	57.8	7.2	51.2	24.1	57.5	8.1	50.3
Change Period (Y+Rc), s	6.5	4.5	6.5	5.0	6.5	4.5	6.5	5.0
Max Green Setting (Gmax), s	28.5	35.5	5.5	48.0	17.6	46.4	10.5	43.0
Max Q Clear Time (g_c+I1), s	16.7	20.2	2.4	44.2	18.2	51.3	2.8	29.2
Green Ext Time (p_c), s	0.6	2.4	0.0	1.9	0.0	0.0	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

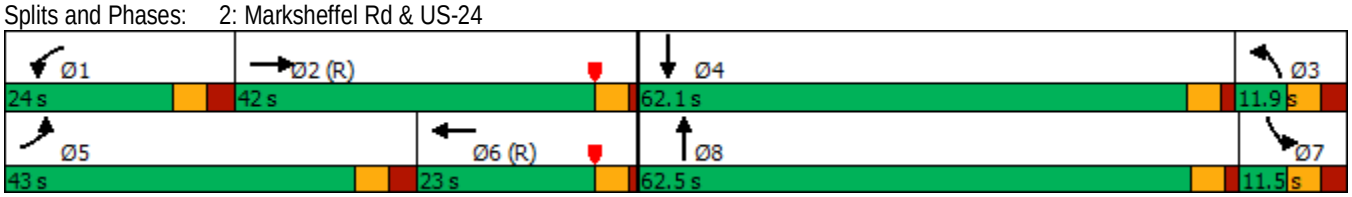
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	670	1200	125	210	585	20	15	1190	245	20	915	510
Future Volume (vph)	670	1200	125	210	585	20	15	1190	245	20	915	510
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	18.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	22.5		10.5	12.5		11.5	12.0	
Total Split (s)	43.0	42.0		24.0	23.0		11.9	62.5		11.5	62.1	
Total Split (%)	30.7%	30.0%		17.1%	16.4%		8.5%	44.6%		8.2%	44.4%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	4.5		6.5	4.5		6.5	5.0		6.5	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	34.2	49.9	140.0	13.2	28.8	140.0	7.7	53.8	140.0	5.2	53.6	140.0
Actuated g/C Ratio	0.24	0.36	1.00	0.09	0.21	1.00	0.06	0.38	1.00	0.04	0.38	1.00
v/c Ratio	0.82	0.97	0.08	0.67	0.83	0.01	0.15	0.89	0.16	0.31	0.70	0.33
Control Delay	58.6	83.5	0.1	71.6	64.0	0.0	66.1	50.6	0.2	78.2	39.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	83.5	0.1	71.6	64.0	0.0	66.1	50.6	0.2	78.2	39.8	0.6
LOS	E	F	A	E	E	A	E	D	A	E	D	A
Approach Delay		69.9			64.4			42.2			26.5	
Approach LOS		E			E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 70.5 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 51.1	Intersection LOS: D
Intersection Capacity Utilization 85.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	670	1200	125	210	585	20	15	1190	245	20	915	510
Future Volume (veh/h)	670	1200	125	210	585	20	15	1190	245	20	915	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	684	1224	0	214	597	0	15	1214	0	20	934	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	787	1317		265	776		164	1322		34	1056	
Arrive On Green	0.23	0.37	0.00	0.08	0.22	0.00	0.09	0.37	0.00	0.02	0.30	0.00
Sat Flow, veh/h	3456	3554	1585	3428	3526	1572	1781	3554	1585	1767	3526	1572
Grp Volume(v), veh/h	684	1224	0	214	597	0	15	1214	0	20	934	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1714	1763	1572	1781	1777	1585	1767	1763	1572
Q Serve(g_s), s	26.7	46.3	0.0	8.6	22.3	0.0	1.1	45.6	0.0	1.6	35.3	0.0
Cycle Q Clear(g_c), s	26.7	46.3	0.0	8.6	22.3	0.0	1.1	45.6	0.0	1.6	35.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	787	1317		265	776		164	1322		34	1056	
V/C Ratio(X)	0.87	0.93		0.81	0.77		0.09	0.92		0.59	0.88	
Avail Cap(c_a), veh/h	901	1317		429	776		164	1460		63	1438	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.84	0.84	0.00
Uniform Delay (d), s/veh	52.0	42.3	0.0	63.6	51.3	0.0	58.2	41.9	0.0	68.1	46.7	0.0
Incr Delay (d2), s/veh	9.6	12.8	0.0	2.2	7.2	0.0	0.1	8.6	0.0	4.9	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	22.5	0.0	3.8	10.6	0.0	0.5	21.4	0.0	0.8	16.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	55.1	0.0	65.8	58.5	0.0	58.3	50.5	0.0	73.0	50.4	0.0
LnGrp LOS	E	E		E	E		E	D		E	D	
Approach Vol, veh/h		1908			811			1229			954	
Approach Delay, s/veh		57.5			60.4			50.6			50.8	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	56.4	19.4	46.9	38.4	35.3	9.2	57.1
Change Period (Y+Rc), s	6.5	4.5	6.5	5.0	6.5	4.5	6.5	5.0
Max Green Setting (Gmax), s	17.5	37.5	5.4	57.1	36.5	18.5	5.0	57.5
Max Q Clear Time (g_c+I1), s	10.6	48.3	3.1	37.3	28.7	24.3	3.6	47.6
Green Ext Time (p_c), s	0.2	0.0	0.0	4.6	3.2	0.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

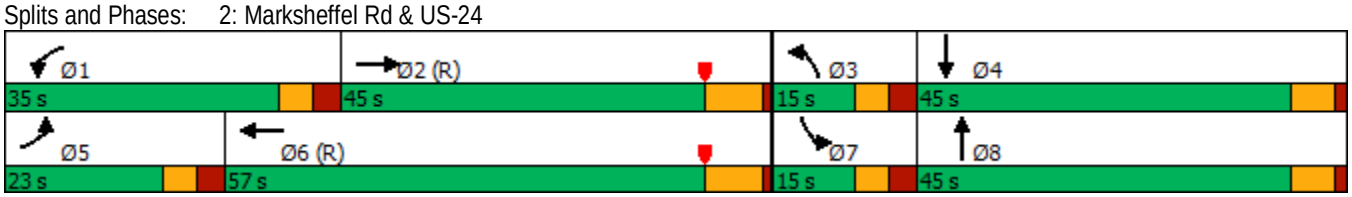
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	425	645	405	1425	25	5	955	135	15	1165	890
Future Volume (vph)	425	645	405	1425	25	5	955	135	15	1165	890
Turn Type	Prot	NA	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases					Free			Free			Free
Detector Phase	5	2	1	6		3	8		7	4	
Switch Phase											
Minimum Initial (s)	6.0	20.0	6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0	12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	23.0	45.0	35.0	57.0		15.0	45.0		15.0	45.0	
Total Split (%)	16.4%	32.1%	25.0%	40.7%		10.7%	32.1%		10.7%	32.1%	
Yellow Time (s)	3.5	6.0	3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0	3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0	6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max		None	None		None	None	
Act Effct Green (s)	16.5	44.6	21.9	50.0	140.0	5.0	48.5	140.0	6.0	51.5	140.0
Actuated g/C Ratio	0.12	0.32	0.16	0.36	1.00	0.04	0.35	1.00	0.04	0.37	1.00
v/c Ratio	1.19	0.65	0.80	1.20	0.02	0.08	0.82	0.09	0.22	0.97	0.61
Control Delay	175.7	34.4	68.9	136.7	0.0	43.4	58.6	0.1	71.1	62.3	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.7	34.4	68.9	136.7	0.0	43.4	58.6	0.1	71.1	62.3	1.8
LOS	F	C	E	F	A	D	E	A	E	E	A
Approach Delay		90.5		120.0			51.3			36.4	
Approach LOS		F		F			D			D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 110 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 74.0	Intersection LOS: E
Intersection Capacity Utilization 100.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	645	0	405	1425	25	5	955	135	15	1165	890
Future Volume (veh/h)	425	645	0	405	1425	25	5	955	135	15	1165	890
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	443	672	0	422	1484	0	5	995	0	16	1214	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	378	1250		478	1404		9	982		29	998	
Arrive On Green	0.12	0.38	0.00	0.14	0.40	0.00	0.01	0.28	0.00	0.02	0.29	0.00
Sat Flow, veh/h	3209	3300	1472	3401	3497	1560	1767	3526	1572	1725	3441	1535
Grp Volume(v), veh/h	443	672	0	422	1484	0	5	995	0	16	1214	0
Grp Sat Flow(s),veh/h/ln	1605	1650	1472	1700	1749	1560	1767	1763	1572	1725	1721	1535
Q Serve(g_s), s	16.5	22.2	0.0	17.0	56.2	0.0	0.4	39.0	0.0	1.3	40.6	0.0
Cycle Q Clear(g_c), s	16.5	22.2	0.0	17.0	56.2	0.0	0.4	39.0	0.0	1.3	40.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	1250		478	1404		9	982		29	998	
V/C Ratio(X)	1.17	0.54		0.88	1.06		0.56	1.01		0.56	1.22	
Avail Cap(c_a), veh/h	378	1250		692	1404		107	982		105	998	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.53	0.53	0.00
Uniform Delay (d), s/veh	61.8	33.9	0.0	59.0	41.9	0.0	69.5	50.5	0.0	68.3	49.7	0.0
Incr Delay (d2), s/veh	101.7	1.7	0.0	7.0	40.8	0.0	18.8	32.0	0.0	3.4	102.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	9.3	0.0	7.8	31.9	0.0	0.2	21.5	0.0	0.6	31.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	163.5	35.6	0.0	66.1	82.7	0.0	88.3	82.5	0.0	71.7	152.1	0.0
LnGrp LOS	F	D		E	F		F	F		E	F	
Approach Vol, veh/h		1115			1906			1000			1230	
Approach Delay, s/veh		86.4			79.0			82.5			151.1	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.2	60.0	7.2	46.6	23.0	63.2	8.8	45.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	28.5	38.0	8.5	39.0	16.5	50.0	8.5	39.0
Max Q Clear Time (g_c+I1), s	19.0	24.2	2.4	42.6	18.5	58.2	3.3	41.0
Green Ext Time (p_c), s	0.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	98.1
HCM 6th LOS	F

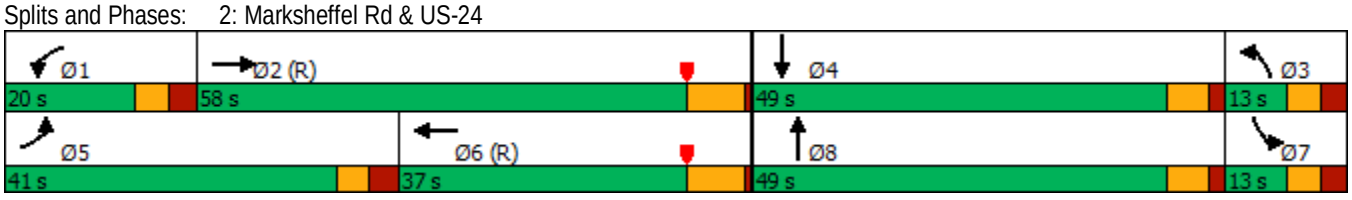
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	785	1415	10	285	690	20	20	1620	320	25	1330	600
Future Volume (vph)	785	1415	10	285	690	20	20	1620	320	25	1330	600
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	27.5		10.5	12.5		11.5	12.0	
Total Split (s)	41.0	58.0		20.0	37.0		13.0	49.0		13.0	49.0	
Total Split (%)	29.3%	41.4%		14.3%	26.4%		9.3%	35.0%		9.3%	35.0%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	35.8	55.9	140.0	13.8	33.9	140.0	5.8	43.0	140.0	6.0	43.0	140.0
Actuated g/C Ratio	0.26	0.40	1.00	0.10	0.24	1.00	0.04	0.31	1.00	0.04	0.31	1.00
v/c Ratio	0.91	1.02	0.01	0.87	0.83	0.01	0.27	1.52	0.21	0.35	1.26	0.39
Control Delay	53.1	90.5	0.0	87.2	60.5	0.0	83.8	281.3	0.2	77.8	165.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	90.5	0.0	87.2	60.5	0.0	83.8	281.3	0.2	77.8	165.4	0.7
LOS	D	F	A	F	E	A	F	F	A	E	F	A
Approach Delay		76.8			66.9			233.4			113.8	
Approach LOS		E			E			F			F	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.52	
Intersection Signal Delay: 128.7	Intersection LOS: F
Intersection Capacity Utilization 108.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	785	1415	10	285	690	20	20	1620	320	25	1330	600
Future Volume (veh/h)	785	1415	10	285	690	20	20	1620	320	25	1330	600
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	801	1444	0	291	704	0	20	1653	0	26	1357	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	846	1379		331	845		40	1091		40	1083	
Arrive On Green	0.24	0.39	0.00	0.10	0.24	0.00	0.02	0.31	0.00	0.02	0.31	0.00
Sat Flow, veh/h	3456	3554	1585	3428	3526	1572	1781	3554	1585	1767	3526	1572
Grp Volume(v), veh/h	801	1444	0	291	704	0	20	1653	0	26	1357	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1714	1763	1572	1781	1777	1585	1767	1763	1572
Q Serve(g_s), s	31.9	54.3	0.0	11.7	26.6	0.0	1.6	43.0	0.0	2.0	43.0	0.0
Cycle Q Clear(g_c), s	31.9	54.3	0.0	11.7	26.6	0.0	1.6	43.0	0.0	2.0	43.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	846	1379		331	845		40	1091		40	1083	
V/C Ratio(X)	0.95	1.05		0.88	0.83		0.49	1.51		0.65	1.25	
Avail Cap(c_a), veh/h	852	1379		331	845		83	1091		82	1083	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.62	0.62	0.00
Uniform Delay (d), s/veh	52.0	42.8	0.0	62.5	50.6	0.0	67.6	48.5	0.0	67.9	48.5	0.0
Incr Delay (d2), s/veh	19.6	37.6	0.0	22.1	9.5	0.0	3.4	236.3	0.0	4.0	118.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	30.8	0.0	6.1	12.8	0.0	0.7	54.7	0.0	1.0	36.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.5	80.5	0.0	84.6	60.0	0.0	71.0	284.8	0.0	71.9	167.3	0.0
LnGrp LOS	E	F		F	E		E	F		E	F	
Approach Vol, veh/h		2245			995			1673			1383	
Approach Delay, s/veh		77.3			67.2			282.2			165.5	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	61.3	9.7	49.0	40.8	40.6	9.7	49.0
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	13.5	51.0	6.5	43.0	34.5	30.0	6.5	43.0
Max Q Clear Time (g_c+I1), s	13.7	56.3	3.6	45.0	33.9	28.6	4.0	45.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	149.5
HCM 6th LOS	F

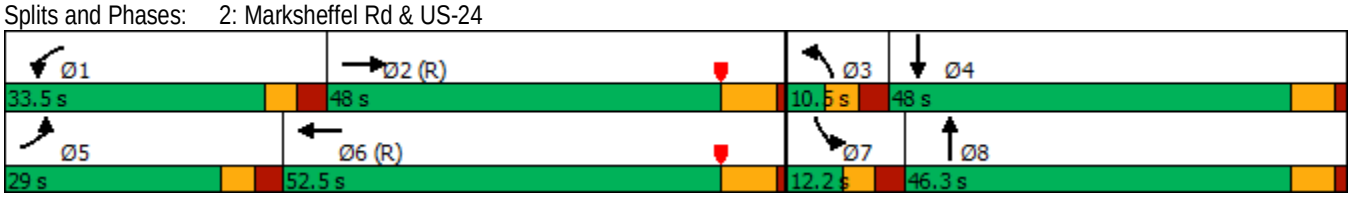
Notes

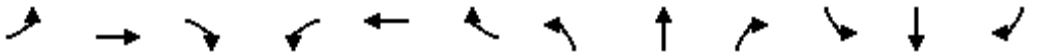
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	645	140	435	1425	25	5	1100	160	15	1330	890
Future Volume (vph)	425	645	140	435	1425	25	5	1100	160	15	1330	890
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.0		12.5	27.0		10.5	12.0		11.5	12.0	
Total Split (s)	29.0	48.0		33.5	52.5		10.5	46.3		12.2	48.0	
Total Split (%)	20.7%	34.3%		23.9%	37.5%		7.5%	33.1%		8.7%	34.3%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	23.6	49.7	140.0	22.8	48.8	140.0	4.0	43.2	140.0	5.4	46.0	140.0
Actuated g/C Ratio	0.17	0.36	1.00	0.16	0.35	1.00	0.03	0.31	1.00	0.04	0.33	1.00
v/c Ratio	0.83	0.41	0.10	0.83	0.85	0.02	0.10	0.74	0.11	0.25	0.86	0.61
Control Delay	91.8	26.4	0.1	69.9	48.7	0.0	56.8	49.8	0.1	74.3	50.4	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.8	26.4	0.1	69.9	48.7	0.0	56.8	49.8	0.1	74.3	50.4	1.8
LOS	F	C	A	E	D	A	E	D	A	E	D	A
Approach Delay		46.3			52.9			43.6			31.2	
Approach LOS		D			D			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 110 (79%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 42.6	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	645	140	435	1425	25	5	1100	160	15	1330	890
Future Volume (veh/h)	425	645	140	435	1425	25	5	1100	160	15	1330	890
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1856	1856	1856	1811	1811	1811
Adj Flow Rate, veh/h	443	672	0	453	1484	0	5	1146	0	16	1385	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	4	4	4	3	3	3	6	6	6
Cap, veh/h	493	1725		507	1806		9	1443		29	1465	
Arrive On Green	0.15	0.36	0.00	0.15	0.36	0.00	0.00	0.09	0.00	0.02	0.30	0.00
Sat Flow, veh/h	3209	4742	1472	3401	5025	1560	1767	5066	1572	1725	4944	1535
Grp Volume(v), veh/h	443	672	0	453	1484	0	5	1146	0	16	1385	0
Grp Sat Flow(s),veh/h/ln	1605	1581	1472	1700	1675	1560	1767	1689	1572	1725	1648	1535
Q Serve(g_s), s	19.0	14.7	0.0	18.3	37.6	0.0	0.4	31.0	0.0	1.3	38.3	0.0
Cycle Q Clear(g_c), s	19.0	14.7	0.0	18.3	37.6	0.0	0.4	31.0	0.0	1.3	38.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	1725		507	1806		9	1443		29	1465	
V/C Ratio(X)	0.90	0.39		0.89	0.82		0.56	0.79		0.56	0.95	
Avail Cap(c_a), veh/h	516	1725		656	1806		50	1458		70	1483	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.95	0.95	0.00	0.41	0.41	0.00
Uniform Delay (d), s/veh	58.2	33.0	0.0	58.5	40.8	0.0	69.7	59.4	0.0	68.3	48.2	0.0
Incr Delay (d2), s/veh	19.4	0.7	0.0	10.5	4.4	0.0	18.0	2.7	0.0	2.6	6.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	5.8	0.0	8.6	16.2	0.0	0.2	14.5	0.0	0.6	16.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.6	33.7	0.0	68.9	45.1	0.0	87.7	62.1	0.0	71.0	54.3	0.0
LnGrp LOS	E	C		E	D		F	E		E	D	
Approach Vol, veh/h		1115			1937			1151			1401	
Approach Delay, s/veh		51.1			50.7			62.2			54.5	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.4	57.9	7.2	47.5	28.0	57.3	8.8	45.9
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	27.0	41.0	4.0	42.0	22.5	45.5	5.7	40.3
Max Q Clear Time (g_c+I1), s	20.3	16.7	2.4	40.3	21.0	39.6	3.3	33.0
Green Ext Time (p_c), s	0.6	3.3	0.0	1.1	0.5	3.7	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

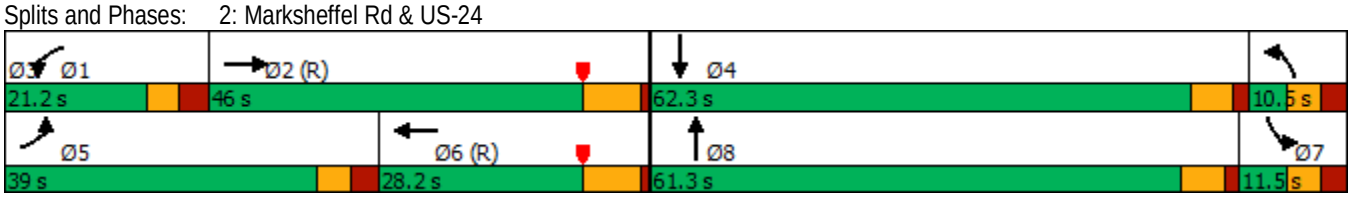
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	785	1415	205	325	690	20	20	1765	345	25	1560	600
Future Volume (vph)	785	1415	205	325	690	20	20	1765	345	25	1560	600
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			Free			Free			Free			Free
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		4.0	6.0		5.0	6.0	
Minimum Split (s)	12.5	27.5		12.5	27.5		10.5	12.5		11.5	12.0	
Total Split (s)	39.0	46.0		21.2	28.2		10.5	61.3		11.5	62.3	
Total Split (%)	27.9%	32.9%		15.1%	20.1%		7.5%	43.8%		8.2%	44.5%	
Yellow Time (s)	3.5	6.0		3.5	6.0		3.5	4.5		3.5	4.5	
All-Red Time (s)	3.0	1.0		3.0	1.0		3.0	1.5		3.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.5	7.0		6.5	7.0		6.5	6.0		6.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	36.3	43.6	140.0	15.4	22.6	140.0	4.8	54.6	140.0	5.0	54.8	140.0
Actuated g/C Ratio	0.26	0.31	1.00	0.11	0.16	1.00	0.03	0.39	1.00	0.04	0.39	1.00
v/c Ratio	0.90	0.91	0.13	0.89	0.87	0.01	0.33	0.91	0.22	0.42	0.81	0.39
Control Delay	58.2	77.1	0.1	86.7	69.4	0.0	74.2	43.8	0.3	86.2	41.7	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	77.1	0.1	86.7	69.4	0.0	74.2	43.8	0.3	86.2	41.7	0.7
LOS	E	E	A	F	E	A	E	D	A	F	D	A
Approach Delay		64.4			73.5			37.0			31.0	
Approach LOS		E			E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 48.7	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 2: Marksheffel Rd & US-24



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	785	1415	205	325	690	20	20	1765	345	25	1560	600
Future Volume (veh/h)	785	1415	205	325	690	20	20	1765	345	25	1560	600
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	801	1444	0	332	704	0	20	1801	0	26	1592	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	802	1569		360	913		78	1937		40	1813	
Arrive On Green	0.23	0.31	0.00	0.11	0.18	0.00	0.06	0.50	0.00	0.02	0.36	0.00
Sat Flow, veh/h	3456	5106	1585	3428	5066	1572	1781	5106	1585	1767	5066	1572
Grp Volume(v), veh/h	801	1444	0	332	704	0	20	1801	0	26	1592	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1714	1689	1572	1781	1702	1585	1767	1689	1572
Q Serve(g_s), s	32.4	38.2	0.0	13.4	18.5	0.0	1.5	46.1	0.0	2.0	41.2	0.0
Cycle Q Clear(g_c), s	32.4	38.2	0.0	13.4	18.5	0.0	1.5	46.1	0.0	2.0	41.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	802	1569		360	913		78	1937		40	1813	
V/C Ratio(X)	1.00	0.92		0.92	0.77		0.26	0.93		0.65	0.88	
Avail Cap(c_a), veh/h	802	1569		360	913		78	2017		63	2037	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.84	0.84	0.00	0.47	0.47	0.00
Uniform Delay (d), s/veh	53.7	46.8	0.0	62.1	54.6	0.0	63.7	33.0	0.0	67.9	42.1	0.0
Incr Delay (d2), s/veh	31.4	10.3	0.0	28.2	6.3	0.0	0.5	6.8	0.0	3.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	17.6	0.0	7.3	8.4	0.0	0.7	18.7	0.0	1.0	17.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.1	57.1	0.0	90.3	60.9	0.0	64.2	39.8	0.0	70.9	44.0	0.0
LnGrp LOS	F	E		F	E		E	D		E	D	
Approach Vol, veh/h		2245			1036			1821			1618	
Approach Delay, s/veh		67.1			70.3			40.1			44.4	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	50.0	12.7	56.1	39.0	32.2	9.7	59.1
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	14.7	39.0	4.0	56.3	32.5	21.2	5.0	55.3
Max Q Clear Time (g_c+I1), s	15.4	40.2	3.5	43.2	34.4	20.5	4.0	48.1
Green Ext Time (p_c), s	0.0	0.0	0.0	6.9	0.0	0.3	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	54.8
HCM 6th LOS	D

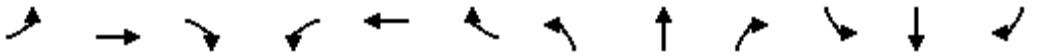
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	28	196	440	39	1	144	798	379	4	1735	36
Future Volume (vph)	16	28	196	440	39	1	144	798	379	4	1735	36
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.2	5.0	140.0	22.2	23.9	140.0	98.0	95.2	140.0	87.0	80.5	80.5
Actuated g/C Ratio	0.04	0.04	1.00	0.16	0.17	1.00	0.70	0.68	1.00	0.62	0.58	0.58
v/c Ratio	0.11	0.45	0.13	0.85	0.07	0.00	0.84	0.37	0.27	0.01	0.91	0.04
Control Delay	65.4	88.2	0.2	73.1	39.1	0.0	68.5	11.5	0.4	7.5	48.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	88.2	0.2	73.1	39.1	0.0	68.5	11.5	0.4	7.5	48.8	0.1
LOS	E	F	A	E	D	A	E	B	A	A	D	A
Approach Delay		14.7			70.2			14.5			47.7	
Approach LOS		B			E			B			D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 37.0	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	28	196	440	39	1	144	798	379	4	1735	36
Future Volume (veh/h)	16	28	196	440	39	1	144	798	379	4	1735	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	16	29	0	454	40	0	148	823	0	4	1789	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	45	63		508	596		171	2078		385	1983	
Arrive On Green	0.01	0.03	0.00	0.15	0.17	0.00	0.05	0.62	0.00	0.01	0.58	0.00
Sat Flow, veh/h	3374	1826	1547	3401	3497	1560	1668	3328	1485	1725	3441	1535
Grp Volume(v), veh/h	16	29	0	454	40	0	148	823	0	4	1789	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1700	1749	1560	1668	1664	1485	1725	1721	1535
Q Serve(g_s), s	0.7	2.2	0.0	18.3	1.3	0.0	5.5	17.3	0.0	0.1	64.2	0.0
Cycle Q Clear(g_c), s	0.7	2.2	0.0	18.3	1.3	0.0	5.5	17.3	0.0	0.1	64.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	45	63		508	596		171	2078		385	1983	
V/C Ratio(X)	0.36	0.46		0.89	0.07		0.87	0.40		0.01	0.90	
Avail Cap(c_a), veh/h	229	65		571	596		218	2078		454	1983	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.69	0.69	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.5	66.3	0.0	58.5	48.7	0.0	35.0	13.1	0.0	12.6	26.2	0.0
Incr Delay (d2), s/veh	4.8	5.2	0.0	11.3	0.0	0.0	24.2	0.6	0.0	0.0	7.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.1	0.0	8.7	0.6	0.0	4.1	6.6	0.0	0.1	27.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	71.5	0.0	69.7	48.7	0.0	59.3	13.7	0.0	12.6	33.3	0.0
LnGrp LOS	E	E		E	D		E	B		B	C	
Approach Vol, veh/h		45			494			971			1793	
Approach Delay, s/veh		72.1			68.0			20.6			33.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	94.4	27.4	10.8	14.1	87.7	8.4	29.9
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.1	19.3	20.3	4.2	7.5	66.2	2.7	3.3
Green Ext Time (p_c), s	0.0	7.3	0.6	0.0	0.1	6.4	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	39	238	350	23	7	158	1688	320	4	933	36
Future Volume (vph)	28	39	238	350	23	7	158	1688	320	4	933	36
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	5.7	7.4	140.0	19.3	23.2	140.0	96.6	93.6	140.0	86.7	80.2	80.2
Actuated g/C Ratio	0.04	0.05	1.00	0.14	0.17	1.00	0.69	0.67	1.00	0.62	0.57	0.57
v/c Ratio	0.21	0.41	0.16	0.79	0.04	0.00	0.47	0.76	0.21	0.03	0.50	0.04
Control Delay	68.1	76.8	0.2	61.6	42.0	0.0	13.1	20.6	0.3	5.0	9.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.1	76.8	0.2	61.6	42.0	0.0	13.1	20.6	0.3	5.0	9.4	0.1
LOS	E	E	A	E	D	A	B	C	A	A	A	A
Approach Delay		16.1			59.3			17.1			9.1	
Approach LOS		B			E			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	39	238	350	23	7	158	1688	320	4	933	36
Future Volume (veh/h)	28	39	238	350	23	7	158	1688	320	4	933	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	29	41	0	368	24	0	166	1777	0	4	982	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	67	66		421	489		396	2292		139	2105	
Arrive On Green	0.02	0.04	0.00	0.12	0.14	0.00	0.05	0.65	0.00	0.01	0.61	0.00
Sat Flow, veh/h	3456	1870	1585	3428	3526	1572	1767	3526	1572	1739	3469	1547
Grp Volume(v), veh/h	29	41	0	368	24	0	166	1777	0	4	982	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1714	1763	1572	1767	1763	1572	1739	1735	1547
Q Serve(g_s), s	1.2	3.0	0.0	14.8	0.8	0.0	4.8	49.8	0.0	0.1	21.7	0.0
Cycle Q Clear(g_c), s	1.2	3.0	0.0	14.8	0.8	0.0	4.8	49.8	0.0	0.1	21.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	66		421	489		396	2292		139	2105	
V/C Ratio(X)	0.43	0.62		0.87	0.05		0.42	0.78		0.03	0.47	
Avail Cap(c_a), veh/h	333	94		575	489		478	2292		209	2105	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.92	0.92	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.9	66.6	0.0	60.3	52.3	0.0	11.3	17.3	0.0	17.4	15.1	0.0
Incr Delay (d2), s/veh	1.7	9.3	0.0	8.0	0.0	0.0	0.3	2.6	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.6	0.0	6.9	0.4	0.0	1.9	20.0	0.0	0.0	8.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	76.0	0.0	68.3	52.3	0.0	11.5	19.9	0.0	17.5	15.8	0.0
LnGrp LOS	E	E		E	D		B	B		B	B	
Approach Vol, veh/h		70			392			1943			986	
Approach Delay, s/veh		73.3			67.3			19.2			15.9	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	98.0	23.7	10.9	13.4	91.9	9.2	25.4
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.1	51.8	16.8	5.0	6.8	23.7	3.2	2.8
Green Ext Time (p_c), s	0.0	11.9	0.4	0.0	0.1	5.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	90	495	580	95	5	425	860	485	5	1860	65
Future Volume (vph)	45	90	495	580	95	5	425	860	485	5	1860	65
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	5.0	140.0	23.5	23.6	140.0	92.3	89.5	140.0	80.5	74.0	74.0
Actuated g/C Ratio	0.05	0.04	1.00	0.17	0.17	1.00	0.66	0.64	1.00	0.58	0.53	0.53
v/c Ratio	0.26	1.45	0.33	1.06	0.17	0.00	2.37	0.42	0.34	0.01	1.07	0.08
Control Delay	67.0	316.0	0.6	119.0	55.4	0.0	653.3	13.8	0.6	6.6	78.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.0	316.0	0.6	119.0	55.4	0.0	653.3	13.8	0.6	6.6	78.8	1.4
LOS	E	F	A	F	E	A	F	B	A	A	E	A
Approach Delay		50.5			109.3			163.7			76.1	
Approach LOS		D			F			F			E	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.37	
Intersection Signal Delay: 108.3	Intersection LOS: F
Intersection Capacity Utilization 114.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	90	495	580	95	5	425	860	485	5	1860	65
Future Volume (veh/h)	45	90	495	580	95	5	425	860	485	5	1860	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	46	93	0	598	98	0	438	887	0	5	1918	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	80	65		571	629		188	2008		343	1819	
Arrive On Green	0.02	0.04	0.00	0.28	0.30	0.00	0.08	0.60	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3374	1826	1547	3401	3497	1560	1668	3328	1485	1725	3441	1535
Grp Volume(v), veh/h	46	93	0	598	98	0	438	887	0	5	1918	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1700	1749	1560	1668	1664	1485	1725	1721	1535
Q Serve(g_s), s	1.9	5.0	0.0	23.5	2.9	0.0	11.5	20.2	0.0	0.2	74.0	0.0
Cycle Q Clear(g_c), s	1.9	5.0	0.0	23.5	2.9	0.0	11.5	20.2	0.0	0.2	74.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	65		571	629		188	2008		343	1819	
V/C Ratio(X)	0.57	1.43		1.05	0.16		2.32	0.44		0.01	1.05	
Avail Cap(c_a), veh/h	229	65		571	629		188	2008		410	1819	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.69	0.69	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.6	67.5	0.0	50.4	41.2	0.0	48.4	15.0	0.0	15.4	33.0	0.0
Incr Delay (d2), s/veh	6.3	259.9	0.0	44.5	0.1	0.0	612.1	0.7	0.0	0.0	37.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.0	0.0	12.7	1.2	0.0	35.5	7.8	0.0	0.1	39.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	327.4	0.0	94.8	41.3	0.0	660.4	15.7	0.0	15.5	70.2	0.0
LnGrp LOS	E	F		F	D		F	B		B	F	
Approach Vol, veh/h		139			696			1325			1923	
Approach Delay, s/veh		243.5			87.3			228.9			70.0	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	91.4	30.0	11.0	18.0	81.0	9.8	31.2
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.2	22.2	25.5	7.0	13.5	76.0	3.9	4.9
Green Ext Time (p_c), s	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	130.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	80	450	500	65	10	395	1810	490	5	1000	60
Future Volume (vph)	55	80	450	500	65	10	395	1810	490	5	1000	60
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.8	7.4	140.0	23.1	26.0	140.0	90.5	87.5	140.0	76.5	70.0	70.0
Actuated g/C Ratio	0.05	0.05	1.00	0.16	0.19	1.00	0.65	0.62	1.00	0.55	0.50	0.50
v/c Ratio	0.35	0.86	0.30	0.94	0.10	0.01	1.26	0.87	0.33	0.04	0.61	0.07
Control Delay	69.7	122.5	0.5	75.4	52.0	0.0	160.0	27.6	0.6	5.4	12.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	122.5	0.5	75.4	52.0	0.0	160.0	27.6	0.6	5.4	12.9	0.1
LOS	E	F	A	E	D	A	F	C	A	A	B	A
Approach Delay		23.6			71.4			42.1			12.2	
Approach LOS		C			E			D			B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay: 36.9	Intersection LOS: D
Intersection Capacity Utilization 92.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	80	450	500	65	10	395	1810	490	5	1000	60
Future Volume (veh/h)	55	80	450	500	65	10	395	1810	490	5	1000	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	58	84	0	526	68	0	416	1905	0	5	1053	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	96	94		569	663		373	2083		90	1742	
Arrive On Green	0.03	0.05	0.00	0.17	0.19	0.00	0.10	0.59	0.00	0.01	0.50	0.00
Sat Flow, veh/h	3456	1870	1585	3428	3526	1572	1767	3526	1572	1739	3469	1547
Grp Volume(v), veh/h	58	84	0	526	68	0	416	1905	0	5	1053	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1714	1763	1572	1767	1763	1572	1739	1735	1547
Q Serve(g_s), s	2.3	6.3	0.0	21.2	2.2	0.0	13.5	67.3	0.0	0.2	30.4	0.0
Cycle Q Clear(g_c), s	2.3	6.3	0.0	21.2	2.2	0.0	13.5	67.3	0.0	0.2	30.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	94		569	663		373	2083		90	1742	
V/C Ratio(X)	0.60	0.90		0.93	0.10		1.11	0.91		0.06	0.60	
Avail Cap(c_a), veh/h	333	94		575	663		373	2083		158	1742	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.70	0.70	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	66.1	0.0	57.5	47.1	0.0	25.8	25.5	0.0	27.9	24.9	0.0
Incr Delay (d2), s/veh	2.2	61.1	0.0	15.7	0.0	0.0	81.2	7.7	0.0	0.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.6	0.0	10.4	1.0	0.0	15.2	29.2	0.0	0.1	12.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	127.3	0.0	73.2	47.1	0.0	107.0	33.2	0.0	28.0	26.5	0.0
LnGrp LOS	E	F		E	D		F	C		C	C	
Approach Vol, veh/h		142			594			2321			1058	
Approach Delay, s/veh		103.7			70.2			46.4			26.5	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	89.7	29.7	13.0	20.0	77.3	10.4	32.3
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.2	69.3	23.2	8.3	15.5	32.4	4.3	4.2
Green Ext Time (p_c), s	0.0	5.7	0.1	0.0	0.0	6.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	46.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	90	495	820	95	5	425	985	635	5	1860	65
Future Volume (vph)	45	90	495	820	95	5	425	985	635	5	1860	65
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	5.0	140.0	23.5	23.6	140.0	92.3	89.5	140.0	80.5	74.0	74.0
Actuated g/C Ratio	0.05	0.04	1.00	0.17	0.17	1.00	0.66	0.64	1.00	0.58	0.53	0.53
v/c Ratio	0.26	1.45	0.33	1.50	0.17	0.00	2.37	0.48	0.45	0.02	1.07	0.08
Control Delay	67.0	316.0	0.6	274.2	52.5	0.0	653.3	14.7	1.0	6.6	77.4	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.0	316.0	0.6	274.2	52.5	0.0	653.3	14.7	1.0	6.6	77.4	1.4
LOS	E	F	A	F	D	A	F	B	A	A	E	A
Approach Delay		50.5			249.8			143.1			74.7	
Approach LOS		D			F			F			E	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.37	
Intersection Signal Delay: 126.4	Intersection LOS: F
Intersection Capacity Utilization 121.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	90	495	820	95	5	425	985	635	5	1860	65
Future Volume (veh/h)	45	90	495	820	95	5	425	985	635	5	1860	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	46	93	0	845	98	0	438	1015	0	5	1918	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	80	65		571	629		188	2008		295	1819	
Arrive On Green	0.02	0.04	0.00	0.28	0.30	0.00	0.08	0.60	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3374	1826	1547	3401	3497	1560	1668	3328	1485	1725	3441	1535
Grp Volume(v), veh/h	46	93	0	845	98	0	438	1015	0	5	1918	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1700	1749	1560	1668	1664	1485	1725	1721	1535
Q Serve(g_s), s	1.9	5.0	0.0	23.5	2.9	0.0	11.5	24.4	0.0	0.2	74.0	0.0
Cycle Q Clear(g_c), s	1.9	5.0	0.0	23.5	2.9	0.0	11.5	24.4	0.0	0.2	74.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	65		571	629		188	2008		295	1819	
V/C Ratio(X)	0.57	1.43		1.48	0.16		2.32	0.51		0.02	1.05	
Avail Cap(c_a), veh/h	229	65		571	629		188	2008		362	1819	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.83	0.83	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.6	67.5	0.0	50.4	41.2	0.0	48.4	15.9	0.0	15.8	33.0	0.0
Incr Delay (d2), s/veh	6.3	259.9	0.0	223.9	0.1	0.0	612.1	0.9	0.0	0.0	37.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.0	0.0	26.9	1.3	0.0	35.5	9.4	0.0	0.1	39.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	327.4	0.0	274.2	41.3	0.0	660.4	16.8	0.0	15.8	70.2	0.0
LnGrp LOS	E	F		F	D		F	B		B	F	
Approach Vol, veh/h		139			943			1453			1923	
Approach Delay, s/veh		243.5			250.0			210.8			70.0	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	91.4	30.0	11.0	18.0	81.0	9.8	31.2
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.2	26.4	25.5	7.0	13.5	76.0	3.9	4.9
Green Ext Time (p_c), s	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	159.4
HCM 6th LOS	F

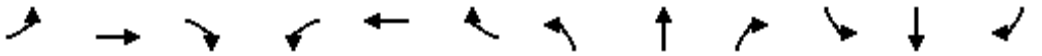
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	80	450	740	65	10	395	1925	625	5	1000	60
Future Volume (vph)	55	80	450	740	65	10	395	1925	625	5	1000	60
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.8	7.0	140.0	23.5	26.0	140.0	90.5	87.5	140.0	76.5	70.0	70.0
Actuated g/C Ratio	0.05	0.05	1.00	0.17	0.19	1.00	0.65	0.62	1.00	0.55	0.50	0.50
v/c Ratio	0.35	0.90	0.30	1.37	0.10	0.01	1.26	0.93	0.42	0.04	0.61	0.07
Control Delay	69.7	134.6	0.5	219.5	53.9	0.0	160.0	32.2	0.8	5.4	12.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	134.6	0.5	219.5	53.9	0.0	160.0	32.2	0.8	5.4	12.9	0.1
LOS	E	F	A	F	D	A	F	C	A	A	B	A
Approach Delay		25.3			203.5			42.7			12.1	
Approach LOS		C			F			D			B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 59.0	Intersection LOS: E
Intersection Capacity Utilization 102.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	80	450	740	65	10	395	1925	625	5	1000	60
Future Volume (veh/h)	55	80	450	740	65	10	395	1925	625	5	1000	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	58	84	0	779	68	0	416	2026	0	5	1053	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	96	94		575	670		372	2076		71	1735	
Arrive On Green	0.03	0.05	0.00	0.17	0.19	0.00	0.10	0.59	0.00	0.01	0.50	0.00
Sat Flow, veh/h	3456	1870	1585	3428	3526	1572	1767	3526	1572	1739	3469	1547
Grp Volume(v), veh/h	58	84	0	779	68	0	416	2026	0	5	1053	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1714	1763	1572	1767	1763	1572	1739	1735	1547
Q Serve(g_s), s	2.3	6.3	0.0	23.5	2.2	0.0	13.5	77.8	0.0	0.2	30.5	0.0
Cycle Q Clear(g_c), s	2.3	6.3	0.0	23.5	2.2	0.0	13.5	77.8	0.0	0.2	30.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	94		575	670		372	2076		71	1735	
V/C Ratio(X)	0.60	0.90		1.35	0.10		1.12	0.98		0.07	0.61	
Avail Cap(c_a), veh/h	333	94		575	670		372	2076		139	1735	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.76	0.76	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	66.1	0.0	58.3	46.8	0.0	25.9	27.8	0.0	32.6	25.1	0.0
Incr Delay (d2), s/veh	2.2	61.1	0.0	167.8	0.0	0.0	82.9	14.8	0.0	0.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.6	0.0	23.6	1.0	0.0	15.3	35.5	0.0	0.1	12.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	127.3	0.0	226.0	46.9	0.0	108.8	42.7	0.0	32.8	26.7	0.0
LnGrp LOS	E	F		F	D		F	D		C	C	
Approach Vol, veh/h		142			847			2442			1058	
Approach Delay, s/veh		103.7			211.6			53.9			26.7	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	89.4	30.0	13.0	20.0	77.0	10.4	32.6
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.2	79.8	25.5	8.3	15.5	32.5	4.3	4.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	78.9
HCM 6th LOS	E

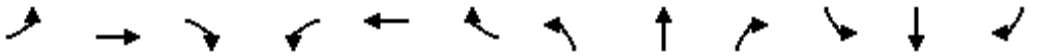
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	90	495	820	95	5	425	985	635	5	1860	65
Future Volume (vph)	45	90	495	820	95	5	425	985	635	5	1860	65
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	5.0	140.0	23.5	23.6	140.0	92.3	89.5	140.0	80.5	74.0	74.0
Actuated g/C Ratio	0.05	0.04	1.00	0.17	0.17	1.00	0.66	0.64	1.00	0.58	0.53	0.53
v/c Ratio	0.26	1.45	0.33	1.03	0.32	0.00	1.22	0.34	0.45	0.02	0.74	0.08
Control Delay	67.0	316.0	0.6	101.3	55.8	0.0	155.2	12.4	1.0	6.6	35.1	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.0	316.0	0.6	101.3	55.8	0.0	155.2	12.4	1.0	6.6	35.1	1.4
LOS	E	F	A	F	E	A	F	B	A	A	D	A
Approach Delay		50.5			96.1			38.5			33.9	
Approach LOS		D			F			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 47.9	Intersection LOS: D
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	90	495	820	95	5	425	985	635	5	1860	65
Future Volume (veh/h)	45	90	495	820	95	5	425	985	635	5	1860	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	46	93	0	845	98	0	438	1015	0	5	1918	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	80	65		830	331		466	2884		331	2613	
Arrive On Green	0.02	0.04	0.00	0.28	0.30	0.00	0.08	0.60	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3374	1826	1547	4944	1841	1560	3237	4782	1485	1725	4944	1535
Grp Volume(v), veh/h	46	93	0	845	98	0	438	1015	0	5	1918	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1648	1841	1560	1618	1594	1485	1725	1648	1535
Q Serve(g_s), s	1.9	5.0	0.0	23.5	5.7	0.0	10.1	15.0	0.0	0.2	41.8	0.0
Cycle Q Clear(g_c), s	1.9	5.0	0.0	23.5	5.7	0.0	10.1	15.0	0.0	0.2	41.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	65		830	331		466	2884		331	2613	
V/C Ratio(X)	0.57	1.43		1.02	0.30		0.94	0.35		0.02	0.73	
Avail Cap(c_a), veh/h	229	65		830	331		466	2884		398	2613	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.83	0.83	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.6	67.5	0.0	50.4	42.2	0.0	33.7	14.0	0.0	15.2	25.4	0.0
Incr Delay (d2), s/veh	6.3	259.9	0.0	33.1	0.4	0.0	27.2	0.3	0.0	0.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.0	0.0	11.4	2.6	0.0	5.8	5.5	0.0	0.1	16.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	327.4	0.0	83.5	42.6	0.0	60.9	14.3	0.0	15.2	27.3	0.0
LnGrp LOS	E	F		F	D		E	B		B	C	
Approach Vol, veh/h		139			943			1453			1923	
Approach Delay, s/veh		243.5			79.3			28.4			27.3	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	91.4	30.0	11.0	18.0	81.0	9.8	31.2
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.2	17.0	25.5	7.0	12.1	43.8	3.9	7.7
Green Ext Time (p_c), s	0.0	9.6	0.0	0.0	0.0	19.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

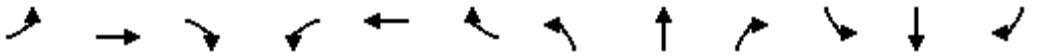
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	80	450	740	65	10	395	1925	625	5	1000	60
Future Volume (vph)	55	80	450	740	65	10	395	1925	625	5	1000	60
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.8	7.2	140.0	23.3	26.0	140.0	90.5	87.5	140.0	78.7	72.2	72.2
Actuated g/C Ratio	0.05	0.05	1.00	0.17	0.19	1.00	0.65	0.62	1.00	0.56	0.52	0.52
v/c Ratio	0.35	0.88	0.30	0.95	0.20	0.01	0.62	0.64	0.42	0.04	0.41	0.07
Control Delay	69.7	129.6	0.5	79.5	55.9	0.0	14.2	18.3	0.8	5.2	9.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	129.6	0.5	79.5	55.9	0.0	14.2	18.3	0.8	5.2	9.4	0.1
LOS	E	F	A	E	E	A	B	B	A	A	A	A
Approach Delay		24.6			76.6			14.0			8.9	
Approach LOS		C			E			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 79.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	80	450	740	65	10	395	1925	625	5	1000	60
Future Volume (veh/h)	55	80	450	740	65	10	395	1925	625	5	1000	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	58	84	0	779	68	0	416	2026	0	5	1053	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	96	94		837	352		756	2983		129	2621	
Arrive On Green	0.03	0.05	0.00	0.06	0.06	0.00	0.07	0.59	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3456	1870	1585	4983	1856	1572	3428	5066	1572	1739	4985	1547
Grp Volume(v), veh/h	58	84	0	779	68	0	416	2026	0	5	1053	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1661	1856	1572	1714	1689	1572	1739	1662	1547
Q Serve(g_s), s	2.3	6.3	0.0	21.8	4.9	0.0	7.5	38.4	0.0	0.2	17.8	0.0
Cycle Q Clear(g_c), s	2.3	6.3	0.0	21.8	4.9	0.0	7.5	38.4	0.0	0.2	17.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	94		837	352		756	2983		129	2621	
V/C Ratio(X)	0.60	0.90		0.93	0.19		0.55	0.68		0.04	0.40	
Avail Cap(c_a), veh/h	333	94		837	352		845	2983		197	2621	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.76	0.76	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	66.1	0.0	65.3	55.4	0.0	14.4	19.7	0.0	18.5	20.0	0.0
Incr Delay (d2), s/veh	2.2	61.1	0.0	13.5	0.1	0.0	0.2	1.3	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.6	0.0	10.8	2.4	0.0	2.9	15.1	0.0	0.1	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	127.3	0.0	78.8	55.5	0.0	14.6	21.0	0.0	18.5	20.4	0.0
LnGrp LOS	E	F		E	E		B	C		B	C	
Approach Vol, veh/h		142			847			2442			1058	
Approach Delay, s/veh		103.7			76.9			19.9			20.4	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	89.4	30.0	13.0	16.4	80.6	10.4	32.6
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.2	40.4	23.8	8.3	9.5	19.8	4.3	6.9
Green Ext Time (p_c), s	0.0	15.9	0.0	0.0	0.4	6.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

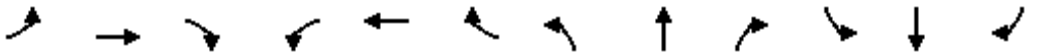
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	45	90	495	95	5	425	985	635	5	1860	65
Future Volume (vph)	45	90	495	95	5	425	985	635	5	1860	65
Turn Type	Prot	NA	Free	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free	2		Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	4.0	5.0		5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	41.0		25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	29.3%		17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead			Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.3	20.9	140.0	9.5	140.0	106.4	103.6	140.0	94.6	88.1	88.1
Actuated g/C Ratio	0.05	0.15	1.00	0.07	1.00	0.76	0.74	1.00	0.68	0.63	0.63
v/c Ratio	0.26	0.34	0.33	0.42	0.00	1.22	0.42	0.45	0.01	0.90	0.07
Control Delay	67.0	54.9	0.6	80.6	0.0	158.2	8.8	1.0	4.0	35.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.0	54.9	0.6	80.6	0.0	158.2	8.8	1.0	4.0	35.6	1.9
LOS	E	D	A	F	A	F	A	A	A	D	A
Approach Delay		13.1		76.7			37.4			34.4	
Approach LOS		B		E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	90	495	0	95	5	425	985	635	5	1860	65
Future Volume (veh/h)	45	90	495	0	95	5	425	985	635	5	1860	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	0	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	46	93	0	0	98	0	438	1015	0	5	1918	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	0	4	4	10	10	10	6	6	6
Cap, veh/h	80	208		0	154		471	2460		400	2286	
Arrive On Green	0.02	0.11	0.00	0.00	0.09	0.00	0.08	0.74	0.00	0.01	0.66	0.00
Sat Flow, veh/h	3374	1826	1547	0	3589	1560	3237	3328	1485	1725	3441	1535
Grp Volume(v), veh/h	46	93	0	0	98	0	438	1015	0	5	1918	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	0	1749	1560	1618	1664	1485	1725	1721	1535
Q Serve(g_s), s	1.9	6.7	0.0	0.0	3.8	0.0	9.8	16.0	0.0	0.1	59.2	0.0
Cycle Q Clear(g_c), s	1.9	6.7	0.0	0.0	3.8	0.0	9.8	16.0	0.0	0.1	59.2	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	208		0	154		471	2460		400	2286	
V/C Ratio(X)	0.57	0.45		0.00	0.64		0.93	0.41		0.01	0.84	
Avail Cap(c_a), veh/h	229	456		0	475		471	2460		467	2286	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.83	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.6	57.9	0.0	0.0	62.8	0.0	41.5	6.9	0.0	7.7	17.8	0.0
Incr Delay (d2), s/veh	6.3	1.5	0.0	0.0	3.6	0.0	25.0	0.5	0.0	0.0	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.2	0.0	0.0	1.7	0.0	9.3	5.5	0.0	0.1	23.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	59.4	0.0	0.0	66.4	0.0	66.5	7.4	0.0	7.7	21.7	0.0
LnGrp LOS	E	E		A	E		E	A		A	C	
Approach Vol, veh/h		139			98			1453			1923	
Approach Delay, s/veh		64.2			66.4			25.2			21.7	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	110.5		22.0	18.0	100.0	9.8	12.1				
Change Period (Y+Rc), s	6.5	7.0		6.0	6.5	7.0	6.5	6.0				
Max Green Setting (Gmax), s	6.5	79.0		35.0	11.5	74.0	9.5	19.0				
Max Q Clear Time (g_c+I1), s	2.1	18.0		8.7	11.8	61.2	3.9	5.8				
Green Ext Time (p_c), s	0.0	9.9		0.4	0.0	10.4	0.0	0.4				

Intersection Summary			
HCM 6th Ctrl Delay		25.9	
HCM 6th LOS		C	

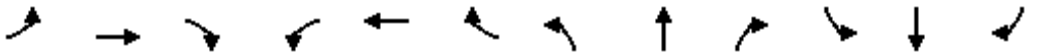
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	80	450	65	10	395	1925	625	5	1000	60
Future Volume (vph)	55	80	450	65	10	395	1925	625	5	1000	60
Turn Type	Prot	NA	Free	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free	2		Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	4.0	5.0		5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	43.0		23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	30.7%		16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead			Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.8	18.6	140.0	7.6	140.0	108.7	105.9	140.0	99.4	92.9	92.9
Actuated g/C Ratio	0.05	0.13	1.00	0.05	1.00	0.78	0.76	1.00	0.71	0.66	0.66
v/c Ratio	0.35	0.34	0.30	0.36	0.01	0.54	0.76	0.42	0.04	0.46	0.06
Control Delay	69.7	57.0	0.5	69.0	0.0	7.2	14.4	0.8	3.0	6.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	57.0	0.5	69.0	0.0	7.2	14.4	0.8	3.0	6.0	0.1
LOS	E	E	A	E	A	A	B	A	A	A	A
Approach Delay		14.7		59.4			10.6			5.7	
Approach LOS		B		E			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 10.8	Intersection LOS: B
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	80	450	0	65	10	395	1925	625	5	1000	60
Future Volume (veh/h)	55	80	450	0	65	10	395	1925	625	5	1000	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	58	84	0	0	68	0	416	2026	0	5	1053	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	3	3	3	3	3	5	5	5
Cap, veh/h	96	206		0	126		864	2620		146	2428	
Arrive On Green	0.03	0.11	0.00	0.00	0.04	0.00	0.05	0.74	0.00	0.01	0.70	0.00
Sat Flow, veh/h	3456	1870	1585	0	3618	1572	3428	3526	1572	1739	3469	1547
Grp Volume(v), veh/h	58	84	0	0	68	0	416	2026	0	5	1053	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	0	1763	1572	1714	1763	1572	1739	1735	1547
Q Serve(g_s), s	2.3	5.9	0.0	0.0	2.7	0.0	4.6	48.6	0.0	0.1	18.3	0.0
Cycle Q Clear(g_c), s	2.3	5.9	0.0	0.0	2.7	0.0	4.6	48.6	0.0	0.1	18.3	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	206		0	126		864	2620		146	2428	
V/C Ratio(X)	0.60	0.41		0.00	0.54		0.48	0.77		0.03	0.43	
Avail Cap(c_a), veh/h	333	494		0	428		1020	2620		213	2428	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.76	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	58.1	0.0	0.0	66.4	0.0	6.9	10.9	0.0	12.6	9.1	0.0
Incr Delay (d2), s/veh	2.2	1.3	0.0	0.0	1.0	0.0	0.2	2.3	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.9	0.0	0.0	1.2	0.0	1.5	17.7	0.0	0.0	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	59.4	0.0	0.0	67.4	0.0	7.0	13.1	0.0	12.7	9.6	0.0
LnGrp LOS	E	E		A	E		A	B		B	A	
Approach Vol, veh/h		142			68			2442			1058	
Approach Delay, s/veh		63.5			67.4			12.1			9.6	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	111.0		21.4	13.6	105.0	10.4	11.0				
Change Period (Y+Rc), s	6.5	7.0		6.0	6.5	7.0	6.5	6.0				
Max Green Setting (Gmax), s	6.5	77.0		37.0	13.5	70.0	13.5	17.0				
Max Q Clear Time (g_c+I1), s	2.1	50.6		7.9	6.6	20.3	4.3	4.7				
Green Ext Time (p_c), s	0.0	14.7		0.4	0.5	6.2	0.0	0.1				

Intersection Summary			
HCM 6th Ctrl Delay		14.4	
HCM 6th LOS		B	

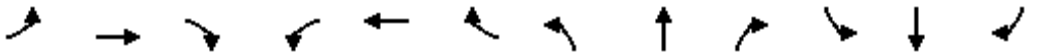
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	95	555	885	105	5	480	1010	695	10	2190	80
Future Volume (vph)	55	95	555	885	105	5	480	1010	695	10	2190	80
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.7	5.0	140.0	23.5	23.2	140.0	92.2	89.4	140.0	80.6	74.0	74.0
Actuated g/C Ratio	0.06	0.04	1.00	0.17	0.17	1.00	0.66	0.64	1.00	0.58	0.53	0.53
v/c Ratio	0.31	1.53	0.37	1.11	0.36	0.00	1.38	0.35	0.49	0.03	0.87	0.09
Control Delay	67.5	345.0	0.7	125.5	65.5	0.0	218.3	12.6	1.2	6.6	39.3	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	345.0	0.7	125.5	65.5	0.0	218.3	12.6	1.2	6.6	39.3	2.1
LOS	E	F	A	F	E	A	F	B	A	A	D	A
Approach Delay		52.3			118.5			54.2			37.9	
Approach LOS		D			F			D			D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 58.3	Intersection LOS: E
Intersection Capacity Utilization 95.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	95	555	885	105	5	480	1010	695	10	2190	80
Future Volume (veh/h)	55	95	555	885	105	5	480	1010	695	10	2190	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	57	98	0	912	108	0	495	1041	0	10	2258	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	94	65		830	323		409	2855		330	2613	
Arrive On Green	0.03	0.04	0.00	0.28	0.29	0.00	0.08	0.60	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3374	1826	1547	4944	1841	1560	3237	4782	1485	1725	4944	1535
Grp Volume(v), veh/h	57	98	0	912	108	0	495	1041	0	10	2258	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1648	1841	1560	1618	1594	1485	1725	1648	1535
Q Serve(g_s), s	2.3	5.0	0.0	23.5	6.4	0.0	11.5	15.7	0.0	0.4	55.5	0.0
Cycle Q Clear(g_c), s	2.3	5.0	0.0	23.5	6.4	0.0	11.5	15.7	0.0	0.4	55.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	65		830	323		409	2855		330	2613	
V/C Ratio(X)	0.61	1.50		1.10	0.33		1.21	0.36		0.03	0.86	
Avail Cap(c_a), veh/h	229	65		830	323		409	2855		386	2613	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	67.5	0.0	50.4	43.0	0.0	43.0	14.5	0.0	14.9	28.6	0.0
Incr Delay (d2), s/veh	6.1	290.5	0.0	46.6	0.1	0.0	115.6	0.4	0.0	0.0	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.6	0.0	12.5	2.8	0.0	10.3	5.8	0.0	0.2	22.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	358.0	0.0	97.0	43.1	0.0	158.5	14.9	0.0	14.9	32.7	0.0
LnGrp LOS	E	F		F	D		F	B		B	C	
Approach Vol, veh/h		155			1020			1536			2268	
Approach Delay, s/veh		253.4			91.3			61.2			32.7	
Approach LOS		F			F			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	90.6	30.0	11.0	18.0	81.0	10.4	30.6
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.4	17.7	25.5	7.0	13.5	57.5	4.3	8.4
Green Ext Time (p_c), s	0.0	10.0	0.0	0.0	0.0	13.9	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

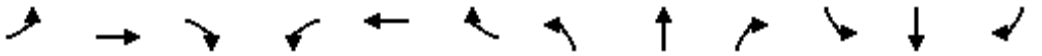
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	95	535	885	80	10	470	2130	930	10	1180	75
Future Volume (vph)	65	95	535	885	80	10	470	2130	930	10	1180	75
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.2	7.0	140.0	23.5	25.6	140.0	90.5	85.0	140.0	77.5	71.0	71.0
Actuated g/C Ratio	0.05	0.05	1.00	0.17	0.18	1.00	0.65	0.61	1.00	0.55	0.51	0.51
v/c Ratio	0.39	1.08	0.36	1.12	0.25	0.01	0.83	0.73	0.62	0.09	0.50	0.09
Control Delay	70.1	175.4	0.6	108.7	58.3	0.0	25.6	22.2	1.9	5.8	10.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	175.4	0.6	108.7	58.3	0.0	25.6	22.2	1.9	5.8	10.0	0.2
LOS	E	F	A	F	E	A	C	C	A	A	A	A
Approach Delay		31.0			103.4			17.3			9.4	
Approach LOS		C			F			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	95	535	885	80	10	470	2130	930	10	1180	75
Future Volume (veh/h)	65	95	535	885	80	10	470	2130	930	10	1180	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	68	100	0	932	84	0	495	2242	0	11	1242	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	109	94		837	346		689	2946		119	2563	
Arrive On Green	0.03	0.05	0.00	0.06	0.06	0.00	0.08	0.58	0.00	0.01	0.51	0.00
Sat Flow, veh/h	3456	1870	1585	4983	1856	1572	3428	5066	1572	1739	4985	1547
Grp Volume(v), veh/h	68	100	0	932	84	0	495	2242	0	11	1242	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1661	1856	1572	1714	1689	1572	1739	1662	1547
Q Serve(g_s), s	2.7	7.0	0.0	23.5	6.0	0.0	9.2	46.5	0.0	0.4	22.6	0.0
Cycle Q Clear(g_c), s	2.7	7.0	0.0	23.5	6.0	0.0	9.2	46.5	0.0	0.4	22.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	94		837	346		689	2946		119	2563	
V/C Ratio(X)	0.62	1.07		1.11	0.24		0.72	0.76		0.09	0.48	
Avail Cap(c_a), veh/h	333	94		837	346		738	2946		173	2563	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.0	66.5	0.0	66.1	56.3	0.0	17.5	22.0	0.0	20.9	22.0	0.0
Incr Delay (d2), s/veh	2.1	113.1	0.0	53.2	0.0	0.0	2.6	1.9	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.3	0.0	14.7	2.9	0.0	3.8	18.5	0.0	0.2	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	179.6	0.0	119.3	56.3	0.0	20.0	23.9	0.0	21.0	22.7	0.0
LnGrp LOS	E	F		F	E		C	C		C	C	
Approach Vol, veh/h		168			1016			2737			1253	
Approach Delay, s/veh		134.9			114.1			23.2			22.6	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	88.4	30.0	13.0	18.0	79.0	10.9	32.1
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.4	48.5	25.5	9.0	11.2	24.6	4.7	8.0
Green Ext Time (p_c), s	0.0	16.4	0.0	0.0	0.3	7.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

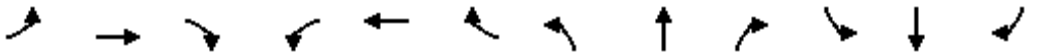
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	95	555	1155	105	5	480	1150	855	10	2190	80
Future Volume (vph)	55	95	555	1155	105	5	480	1150	855	10	2190	80
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	11.0		30.0	25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	7.9%		21.4%	17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.7	5.0	140.0	23.5	23.2	140.0	92.2	89.4	140.0	80.6	74.0	74.0
Actuated g/C Ratio	0.06	0.04	1.00	0.17	0.17	1.00	0.66	0.64	1.00	0.58	0.53	0.53
v/c Ratio	0.31	1.53	0.37	1.45	0.36	0.00	1.38	0.39	0.60	0.03	0.87	0.09
Control Delay	67.5	345.0	0.7	255.3	51.7	0.0	218.3	13.1	1.8	6.9	43.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	345.0	0.7	255.3	51.7	0.0	218.3	13.1	1.8	6.9	43.1	2.9
LOS	E	F	A	F	D	A	F	B	A	A	D	A
Approach Delay		52.3			237.5			48.9			41.6	
Approach LOS		D			F			D			D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 82.2	Intersection LOS: F
Intersection Capacity Utilization 100.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	95	555	1155	105	5	480	1150	855	10	2190	80
Future Volume (veh/h)	55	95	555	1155	105	5	480	1150	855	10	2190	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	57	98	0	1191	108	0	495	1186	0	10	2258	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	10	10	10	6	6	6
Cap, veh/h	94	65		830	323		409	2855		287	2613	
Arrive On Green	0.03	0.04	0.00	0.28	0.29	0.00	0.08	0.60	0.00	0.01	0.53	0.00
Sat Flow, veh/h	3374	1826	1547	4944	1841	1560	3237	4782	1485	1725	4944	1535
Grp Volume(v), veh/h	57	98	0	1191	108	0	495	1186	0	10	2258	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	1648	1841	1560	1618	1594	1485	1725	1648	1535
Q Serve(g_s), s	2.3	5.0	0.0	23.5	6.4	0.0	11.5	18.6	0.0	0.4	55.5	0.0
Cycle Q Clear(g_c), s	2.3	5.0	0.0	23.5	6.4	0.0	11.5	18.6	0.0	0.4	55.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	65		830	323		409	2855		287	2613	
V/C Ratio(X)	0.61	1.50		1.44	0.33		1.21	0.42		0.03	0.86	
Avail Cap(c_a), veh/h	229	65		830	323		409	2855		344	2613	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.86	0.86	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	67.5	0.0	50.4	43.0	0.0	43.0	15.1	0.0	15.0	28.6	0.0
Incr Delay (d2), s/veh	6.1	290.5	0.0	201.8	0.5	0.0	115.6	0.4	0.0	0.0	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	7.6	0.0	24.4	2.9	0.0	10.3	6.8	0.0	0.2	22.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	358.0	0.0	252.2	43.6	0.0	158.5	15.6	0.0	15.1	32.7	0.0
LnGrp LOS	E	F		F	D		F	B		B	C	
Approach Vol, veh/h		155			1299			1681			2268	
Approach Delay, s/veh		253.4			234.9			57.7			32.7	
Approach LOS		F			F			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	90.6	30.0	11.0	18.0	81.0	10.4	30.6
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	79.0	23.5	5.0	11.5	74.0	9.5	19.0
Max Q Clear Time (g_c+I1), s	2.4	20.6	25.5	7.0	13.5	57.5	4.3	8.4
Green Ext Time (p_c), s	0.0	12.1	0.0	0.0	0.0	13.9	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	95.4
HCM 6th LOS	F

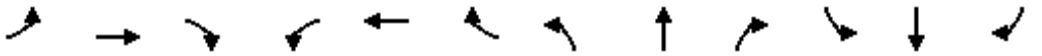
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	95	535	1160	80	10	470	2325	1165	10	1180	75
Future Volume (vph)	65	95	535	1160	80	10	470	2325	1165	10	1180	75
Turn Type	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free	2		Free	6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	5.0		5.0	5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.5	11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	13.0		30.0	23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	9.3%		21.4%	16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.5	6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.2	7.0	140.0	23.5	25.6	140.0	90.5	85.0	140.0	77.5	71.0	71.0
Actuated g/C Ratio	0.05	0.05	1.00	0.17	0.18	1.00	0.65	0.61	1.00	0.55	0.51	0.51
v/c Ratio	0.39	1.08	0.36	1.47	0.25	0.01	0.83	0.80	0.78	0.09	0.50	0.09
Control Delay	70.1	175.4	0.6	258.9	62.6	0.0	25.6	24.6	4.0	6.3	10.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	175.4	0.6	258.9	62.6	0.0	25.6	24.6	4.0	6.3	10.4	0.2
LOS	E	F	A	F	E	A	C	C	A	A	B	A
Approach Delay		31.0			244.2			18.7			9.7	
Approach LOS		C			F			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay: 57.6	Intersection LOS: E
Intersection Capacity Utilization 94.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	95	535	1160	80	10	470	2325	1165	10	1180	75
Future Volume (veh/h)	65	95	535	1160	80	10	470	2325	1165	10	1180	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	68	100	0	1221	84	0	495	2447	0	11	1242	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	5	5	5
Cap, veh/h	109	94		837	346		689	2946		103	2563	
Arrive On Green	0.03	0.05	0.00	0.06	0.06	0.00	0.08	0.58	0.00	0.01	0.51	0.00
Sat Flow, veh/h	3456	1870	1585	4983	1856	1572	3428	5066	1572	1739	4985	1547
Grp Volume(v), veh/h	68	100	0	1221	84	0	495	2447	0	11	1242	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1661	1856	1572	1714	1689	1572	1739	1662	1547
Q Serve(g_s), s	2.7	7.0	0.0	23.5	6.0	0.0	9.2	54.7	0.0	0.4	22.6	0.0
Cycle Q Clear(g_c), s	2.7	7.0	0.0	23.5	6.0	0.0	9.2	54.7	0.0	0.4	22.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	94		837	346		689	2946		103	2563	
V/C Ratio(X)	0.62	1.07		1.46	0.24		0.72	0.83		0.11	0.48	
Avail Cap(c_a), veh/h	333	94		837	346		738	2946		158	2563	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.46	0.46	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.0	66.5	0.0	66.1	56.3	0.0	17.5	23.7	0.0	23.6	22.0	0.0
Incr Delay (d2), s/veh	2.1	113.1	0.0	209.9	0.1	0.0	2.6	2.9	0.0	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.3	0.0	26.8	2.9	0.0	3.8	21.9	0.0	0.2	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	179.6	0.0	276.1	56.4	0.0	20.0	26.6	0.0	23.8	22.7	0.0
LnGrp LOS	E	F		F	E		C	C		C	C	
Approach Vol, veh/h		168			1305			2942			1253	
Approach Delay, s/veh		134.9			261.9			25.5			22.7	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	88.4	30.0	13.0	18.0	79.0	10.9	32.1
Change Period (Y+Rc), s	6.5	7.0	6.5	6.0	6.5	7.0	6.5	6.0
Max Green Setting (Gmax), s	6.5	77.0	23.5	7.0	13.5	70.0	13.5	17.0
Max Q Clear Time (g_c+I1), s	2.4	56.7	25.5	9.0	11.2	24.6	4.7	8.0
Green Ext Time (p_c), s	0.0	14.5	0.0	0.0	0.3	7.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	82.5
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	95	555	105	5	480	1150	855	10	2190	80
Future Volume (vph)	55	95	555	105	5	480	1150	855	10	2190	80
Turn Type	Prot	NA	Free	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free	2		Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	4.0	5.0		5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	41.0		25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	29.3%		17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead			Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.7	21.7	140.0	9.9	140.0	105.6	102.8	140.0	93.9	87.3	87.3
Actuated g/C Ratio	0.06	0.16	1.00	0.07	1.00	0.75	0.73	1.00	0.67	0.62	0.62
v/c Ratio	0.31	0.35	0.37	0.44	0.00	1.38	0.49	0.60	0.03	1.06	0.08
Control Delay	67.5	54.3	0.7	72.6	0.0	222.1	10.1	1.8	4.1	66.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	54.3	0.7	72.6	0.0	222.1	10.1	1.8	4.1	66.4	2.5
LOS	E	D	A	E	A	F	B	A	A	E	A
Approach Delay		13.2		69.4			48.2			63.9	
Approach LOS		B		E			D			E	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	
Intersection Signal Delay: 50.6	Intersection LOS: D
Intersection Capacity Utilization 98.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	95	555	0	105	5	480	1150	855	10	2190	80
Future Volume (veh/h)	55	95	555	0	105	5	480	1150	855	10	2190	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	0	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	57	98	0	0	108	0	495	1186	0	10	2258	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	0	4	4	10	10	10	6	6	6
Cap, veh/h	94	221		0	164		370	2415		338	2262	
Arrive On Green	0.03	0.12	0.00	0.00	0.09	0.00	0.08	0.73	0.00	0.01	0.66	0.00
Sat Flow, veh/h	3374	1826	1547	0	3589	1560	3237	3328	1485	1725	3441	1535
Grp Volume(v), veh/h	57	98	0	0	108	0	495	1186	0	10	2258	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	0	1749	1560	1618	1664	1485	1725	1721	1535
Q Serve(g_s), s	2.3	7.0	0.0	0.0	4.2	0.0	11.5	21.3	0.0	0.3	91.6	0.0
Cycle Q Clear(g_c), s	2.3	7.0	0.0	0.0	4.2	0.0	11.5	21.3	0.0	0.3	91.6	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	221		0	164		370	2415		338	2262	
V/C Ratio(X)	0.61	0.44		0.00	0.66		1.34	0.49		0.03	1.00	
Avail Cap(c_a), veh/h	229	456		0	475		370	2415		394	2262	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	57.1	0.0	0.0	62.3	0.0	53.0	8.2	0.0	8.1	23.9	0.0
Incr Delay (d2), s/veh	6.1	1.4	0.0	0.0	0.4	0.0	169.8	0.7	0.0	0.0	18.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.3	0.0	0.0	1.8	0.0	15.3	7.4	0.0	0.1	40.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	58.5	0.0	0.0	62.7	0.0	222.8	8.9	0.0	8.2	42.5	0.0
LnGrp LOS	E	E		A	E		F	A		A	D	
Approach Vol, veh/h		155			108			1681			2268	
Approach Delay, s/veh		64.0			62.7			71.9			42.3	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	108.6		23.0	18.0	99.0	10.4	12.6				
Change Period (Y+Rc), s	6.5	7.0		6.0	6.5	7.0	6.5	6.0				
Max Green Setting (Gmax), s	6.5	79.0		35.0	11.5	74.0	9.5	19.0				
Max Q Clear Time (g_c+I1), s	2.3	23.3		9.0	13.5	93.6	4.3	6.2				
Green Ext Time (p_c), s	0.0	12.6		0.5	0.0	0.0	0.0	0.4				

Intersection Summary			
HCM 6th Ctrl Delay		55.4	
HCM 6th LOS		E	

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	65	95	535	80	10	470	2325	1165	10	1180	75
Future Volume (vph)	65	95	535	80	10	470	2325	1165	10	1180	75
Turn Type	Prot	NA	Free	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free	2		Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	4.0	5.0		5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		11.0		13.0	30.0		13.0	30.0	30.0
Total Split (s)	20.0	43.0		23.0		20.0	84.0		13.0	77.0	77.0
Total Split (%)	14.3%	30.7%		16.4%		14.3%	60.0%		9.3%	55.0%	55.0%
Yellow Time (s)	3.5	4.0		4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead			Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.2	19.7	140.0	8.3	140.0	107.8	102.3	140.0	92.4	85.9	85.9
Actuated g/C Ratio	0.05	0.14	1.00	0.06	1.00	0.77	0.73	1.00	0.66	0.61	0.61
v/c Ratio	0.39	0.38	0.36	0.41	0.01	0.69	0.96	0.78	0.09	0.59	0.08
Control Delay	70.1	57.2	0.6	63.0	0.0	13.2	29.0	4.0	4.8	9.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	57.2	0.6	63.0	0.0	13.2	29.0	4.0	4.8	9.0	0.1
LOS	E	E	A	E	A	B	C	A	A	A	A
Approach Delay		14.8		55.7			19.8			8.5	
Approach LOS		B		E			B			A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 94.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	95	535	0	80	10	470	2325	1165	10	1180	75
Future Volume (veh/h)	65	95	535	0	80	10	470	2325	1165	10	1180	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	68	100	0	0	84	0	495	2447	0	11	1242	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	3	3	3	3	3	5	5	5
Cap, veh/h	109	219		0	138		745	2568		93	2372	
Arrive On Green	0.03	0.12	0.00	0.00	0.01	0.00	0.06	0.73	0.00	0.01	0.68	0.00
Sat Flow, veh/h	3456	1870	1585	0	3618	1572	3428	3526	1572	1739	3469	1547
Grp Volume(v), veh/h	68	100	0	0	84	0	495	2447	0	11	1242	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	0	1763	1572	1714	1763	1572	1739	1735	1547
Q Serve(g_s), s	2.7	7.0	0.0	0.0	3.3	0.0	5.8	86.3	0.0	0.3	24.7	0.0
Cycle Q Clear(g_c), s	2.7	7.0	0.0	0.0	3.3	0.0	5.8	86.3	0.0	0.3	24.7	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	219		0	138		745	2568		93	2372	
V/C Ratio(X)	0.62	0.46		0.00	0.61		0.66	0.95		0.12	0.52	
Avail Cap(c_a), veh/h	333	494		0	428		871	2568		147	2372	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.0	57.6	0.0	0.0	68.0	0.0	10.7	16.9	0.0	31.3	10.9	0.0
Incr Delay (d2), s/veh	2.1	1.5	0.0	0.0	0.1	0.0	1.0	9.7	0.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.4	0.0	0.0	1.5	0.0	2.7	34.2	0.0	0.2	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	59.1	0.0	0.0	68.2	0.0	11.7	26.6	0.0	31.5	11.7	0.0
LnGrp LOS	E	E		A	E		B	C		C	B	
Approach Vol, veh/h		168			84			2942			1253	
Approach Delay, s/veh		63.1			68.2			24.1			11.9	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	109.0		22.4	14.9	102.7	10.9	11.5				
Change Period (Y+Rc), s	6.5	7.0		6.0	6.5	7.0	6.5	6.0				
Max Green Setting (Gmax), s	6.5	77.0		37.0	13.5	70.0	13.5	17.0				
Max Q Clear Time (g_c+I1), s	2.3	88.3		9.0	7.8	26.7	4.7	5.3				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.6	7.9	0.0	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.0	
HCM 6th LOS		C	

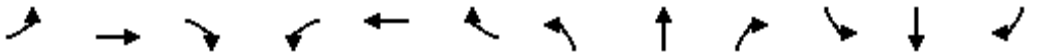
Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	95	555	105	5	480	1150	855	10	2190	80
Future Volume (vph)	55	95	555	105	5	480	1150	855	10	2190	80
Turn Type	Prot	NA	Free	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free	2		Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	4.0	5.0		5.0		6.0	22.0		6.0	22.0	22.0
Minimum Split (s)	10.5	11.0		24.0		12.5	29.0		12.5	29.0	29.0
Total Split (s)	16.0	41.0		25.0		18.0	86.0		13.0	81.0	81.0
Total Split (%)	11.4%	29.3%		17.9%		12.9%	61.4%		9.3%	57.9%	57.9%
Yellow Time (s)	3.5	4.0		4.0		3.5	6.0		3.5	6.0	6.0
All-Red Time (s)	3.0	2.0		2.0		3.0	1.0		3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0		6.0		6.5	7.0		6.5	7.0	7.0
Lead/Lag	Lead			Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	7.7	21.7	140.0	9.9	140.0	105.6	102.8	140.0	93.9	87.3	87.3
Actuated g/C Ratio	0.06	0.16	1.00	0.07	1.00	0.75	0.73	1.00	0.67	0.62	0.62
v/c Ratio	0.31	0.35	0.37	0.44	0.00	1.38	0.34	0.60	0.03	0.74	0.08
Control Delay	67.5	54.3	0.7	72.5	0.0	222.1	8.1	1.8	4.1	26.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	54.3	0.7	72.5	0.0	222.1	8.1	1.8	4.1	26.6	2.5
LOS	E	D	A	E	A	F	A	A	A	C	A
Approach Delay		13.2		69.3			47.3			25.7	
Approach LOS		B		E			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 52 (37%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	
Intersection Signal Delay: 34.6	Intersection LOS: C
Intersection Capacity Utilization 80.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	95	555	0	105	5	480	1150	855	10	2190	80
Future Volume (veh/h)	55	95	555	0	105	5	480	1150	855	10	2190	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	0	1841	1841	1752	1752	1752	1811	1811	1811
Adj Flow Rate, veh/h	57	98	0	0	108	0	495	1186	0	10	2258	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	0	4	4	10	10	10	6	6	6
Cap, veh/h	94	221		0	164		481	3470		366	3250	
Arrive On Green	0.03	0.12	0.00	0.00	0.09	0.00	0.08	0.73	0.00	0.01	0.66	0.00
Sat Flow, veh/h	3374	1826	1547	0	3589	1560	3237	4782	1485	1725	4944	1535
Grp Volume(v), veh/h	57	98	0	0	108	0	495	1186	0	10	2258	0
Grp Sat Flow(s),veh/h/ln	1687	1826	1547	0	1749	1560	1618	1594	1485	1725	1648	1535
Q Serve(g_s), s	2.3	7.0	0.0	0.0	4.2	0.0	11.5	12.7	0.0	0.3	40.3	0.0
Cycle Q Clear(g_c), s	2.3	7.0	0.0	0.0	4.2	0.0	11.5	12.7	0.0	0.3	40.3	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	221		0	164		481	3470		366	3250	
V/C Ratio(X)	0.61	0.44		0.00	0.66		1.03	0.34		0.03	0.69	
Avail Cap(c_a), veh/h	229	456		0	475		481	3470		422	3250	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.3	57.1	0.0	0.0	62.3	0.0	40.2	7.0	0.0	7.7	15.1	0.0
Incr Delay (d2), s/veh	6.1	1.4	0.0	0.0	0.4	0.0	48.9	0.3	0.0	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.3	0.0	0.0	1.8	0.0	11.8	4.2	0.0	0.1	14.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	58.5	0.0	0.0	62.7	0.0	89.1	7.3	0.0	7.7	16.4	0.0
LnGrp LOS	E	E		A	E		F	A		A	B	
Approach Vol, veh/h		155			108			1681			2268	
Approach Delay, s/veh		64.0			62.7			31.4			16.3	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	108.6		23.0	18.0	99.0	10.4	12.6				
Change Period (Y+Rc), s	6.5	7.0		6.0	6.5	7.0	6.5	6.0				
Max Green Setting (Gmax), s	6.5	79.0		35.0	11.5	74.0	9.5	19.0				
Max Q Clear Time (g_c+I1), s	2.3	14.7		9.0	13.5	42.3	4.3	6.2				
Green Ext Time (p_c), s	0.0	12.2		0.5	0.0	23.6	0.0	0.4				

Intersection Summary			
HCM 6th Ctrl Delay		25.3	
HCM 6th LOS		C	

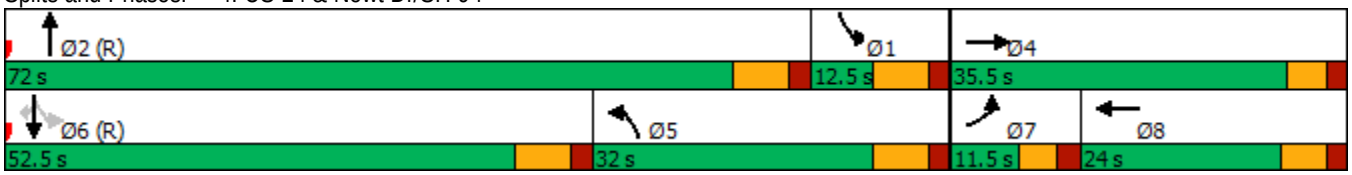
Notes

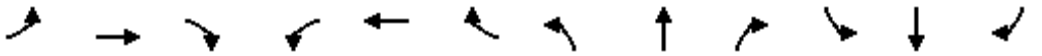
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	65	95	535	80	10	470	2325	1165	10	1180	75
Future Volume (vph)	65	95	535	80	10	470	2325	1165	10	1180	75
Turn Type	Prot	NA	Free	NA	Free	Prot	NA	Free	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases			Free		Free			Free	6		6
Detector Phase	7	4		8		5	2		1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.5	24.5		24.0		12.0	25.0		12.5	25.5	25.5
Total Split (s)	11.5	35.5		24.0		32.0	72.0		12.5	52.5	52.5
Total Split (%)	9.6%	29.6%		20.0%		26.7%	60.0%		10.4%	43.8%	43.8%
Yellow Time (s)	3.5	3.5		4.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		6.0		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead			Lag		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes			Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	6.6	18.7	120.0	8.4	120.0	22.0	86.3	120.0	65.3	59.8	59.8
Actuated g/C Ratio	0.06	0.16	1.00	0.07	1.00	0.18	0.72	1.00	0.54	0.50	0.50
v/c Ratio	0.36	0.34	0.36	0.34	0.01	0.80	0.68	0.78	0.08	0.50	0.09
Control Delay	60.5	47.1	0.6	57.6	0.0	56.7	11.9	4.0	11.9	27.5	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	47.1	0.6	57.6	0.0	56.7	11.9	4.0	11.9	27.5	1.6
LOS	E	D	A	E	A	E	B	A	B	C	A
Approach Delay		12.5		50.9			14.9			25.8	
Approach LOS		B		D			B			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 55.9 (47%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 17.5	Intersection LOS: B
Intersection Capacity Utilization 73.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: US-24 & Newt Dr/SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	95	535	0	80	10	470	2325	1165	10	1180	75
Future Volume (veh/h)	65	95	535	0	80	10	470	2325	1165	10	1180	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1856	1856	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	68	100	0	0	84	0	495	2447	0	11	1242	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	3	3	3	3	3	5	5	5
Cap, veh/h	129	235		0	149		1127	2744		349	1890	
Arrive On Green	0.04	0.13	0.00	0.00	0.04	0.00	0.33	0.54	0.00	0.17	0.38	0.00
Sat Flow, veh/h	3456	1870	1585	0	3618	1572	3428	5066	1572	1739	4985	1547
Grp Volume(v), veh/h	68	100	0	0	84	0	495	2447	0	11	1242	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	0	1763	1572	1714	1689	1572	1739	1662	1547
Q Serve(g_s), s	2.3	5.9	0.0	0.0	2.8	0.0	13.6	51.4	0.0	0.0	24.7	0.0
Cycle Q Clear(g_c), s	2.3	5.9	0.0	0.0	2.8	0.0	13.6	51.4	0.0	0.0	24.7	0.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	235		0	149		1127	2744		349	1890	
V/C Ratio(X)	0.53	0.43		0.00	0.56		0.44	0.89		0.03	0.66	
Avail Cap(c_a), veh/h	173	468		0	529		1127	2744		349	1890	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	48.5	0.0	0.0	56.4	0.0	31.6	24.4	0.0	41.7	30.8	0.0
Incr Delay (d2), s/veh	3.3	1.2	0.0	0.0	0.3	0.0	0.3	4.9	0.0	0.0	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.9	0.0	0.0	1.3	0.0	5.7	20.8	0.0	0.3	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	49.7	0.0	0.0	56.7	0.0	31.9	29.3	0.0	41.8	32.6	0.0
LnGrp LOS	E	D		A	E		C	C		D	C	
Approach Vol, veh/h		168			84			2942			1253	
Approach Delay, s/veh		53.9			56.7			29.7			32.7	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.9	72.0		21.1	46.4	52.5	10.0	11.1				
Change Period (Y+Rc), s	7.0	7.0		* 6	7.0	7.0	5.5	6.0				
Max Green Setting (Gmax), s	5.5	65.0		* 30	25.0	45.5	6.0	18.0				
Max Q Clear Time (g_c+I1), s	2.0	53.4		7.9	15.6	26.7	4.3	4.8				
Green Ext Time (p_c), s	0.0	10.5		0.4	1.3	8.9	0.0	0.3				

Intersection Summary			
HCM 6th Ctrl Delay		32.0	
HCM 6th LOS		C	

Notes

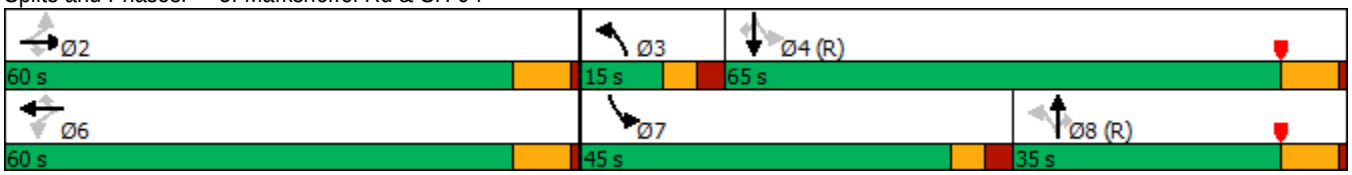
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	254	54	28	297	77	54	270	18	256	501	3
Future Volume (vph)	254	54	28	297	77	54	270	18	256	501	3
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	11.5	17.0	17.0	12.5	17.0	17.0
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	35.0	35.0	45.0	65.0	65.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	10.7%	25.0%	25.0%	32.1%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	32.7	32.7	32.7	32.7	32.7	79.9	72.1	72.1	93.6	82.0	82.0
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.57	0.52	0.52	0.67	0.59	0.59
v/c Ratio	0.67	0.13	0.20	0.77	0.18	0.12	0.17	0.02	0.38	0.27	0.00
Control Delay	54.6	1.0	43.1	62.3	1.8	11.1	20.5	0.1	22.1	28.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	1.0	43.1	62.3	1.8	11.1	20.5	0.1	22.1	28.2	0.0
LOS	D	A	D	E	A	B	C	A	C	C	A
Approach Delay	45.2			49.3			17.9			26.1	
Approach LOS	D			D			B			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 19 (14%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	254	54	28	297	77	54	270	18	256	501	3
Future Volume (veh/h)	0	254	54	28	297	77	54	270	18	256	501	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1826	1826	1826	1856	1856	1856
Adj Flow Rate, veh/h	0	276	-104	30	323	-25	59	293	20	278	545	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	6	6	6	5	5	5	3	3	3
Cap, veh/h	51	379	321	123	385	326	558	1931	861	746	2147	958
Arrive On Green	0.00	0.07	0.00	0.21	0.21	0.00	0.03	0.56	0.56	0.08	0.61	0.61
Sat Flow, veh/h	1030	1781	1510	1174	1811	1535	1739	3469	1547	1767	3526	1572
Grp Volume(v), veh/h	0	276	-104	30	323	-25	59	293	20	278	545	3
Grp Sat Flow(s),veh/h/ln	1030	1781	1510	1174	1811	1535	1739	1735	1547	1767	1763	1572
Q Serve(g_s), s	0.0	21.3	0.0	3.4	23.9	0.0	2.0	5.7	0.8	9.0	10.0	0.1
Cycle Q Clear(g_c), s	0.0	21.3	0.0	24.7	23.9	0.0	2.0	5.7	0.8	9.0	10.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	379	321	123	385	326	558	1931	861	746	2147	958
V/C Ratio(X)	0.00	0.73	-0.32	0.24	0.84	-0.08	0.11	0.15	0.02	0.37	0.25	0.00
Avail Cap(c_a), veh/h	222	674	572	318	686	581	608	1931	861	1083	2147	958
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	61.1	0.0	63.4	52.8	0.0	12.3	15.0	13.9	10.2	12.7	10.7
Incr Delay (d2), s/veh	0.0	3.7	0.0	1.5	6.9	0.0	0.1	0.2	0.0	0.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	0.0	1.1	11.6	0.0	0.8	2.3	0.3	3.5	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	64.8	0.0	64.8	59.7	0.0	12.4	15.2	14.0	10.5	12.9	10.7
LnGrp LOS	A	E	A	E	E	A	B	B	B	B	B	B
Approach Vol, veh/h		172			328			372			826	
Approach Delay, s/veh		104.1			64.7			14.7			12.1	
Approach LOS		F			E			B			B	

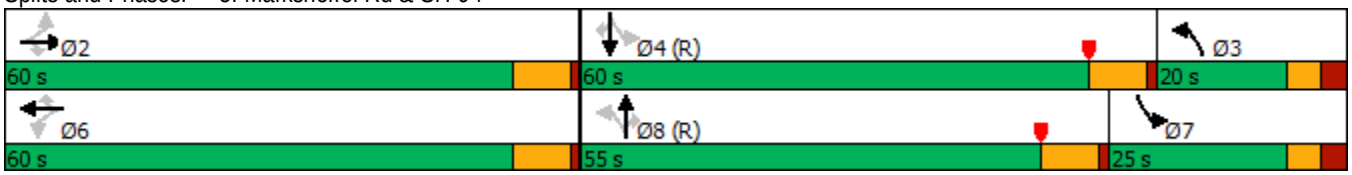
Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	36.8	11.0	92.2	36.8	18.3	84.9
Change Period (Y+Rc), s	7.0	6.5	7.0	7.0	6.5	7.0
Max Green Setting (Gmax), s	53.0	8.5	58.0	53.0	38.5	28.0
Max Q Clear Time (g_c+I1), s	23.3	4.0	12.0	26.7	11.0	7.7
Green Ext Time (p_c), s	2.5	0.0	10.8	3.1	0.8	4.1

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	294	94	39	356	343	76	819	23	158	573	7
Future Volume (vph)	294	94	39	356	343	76	819	23	158	573	7
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	11.5	17.5	17.5	12.5	17.5	17.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	20.0	55.0	55.0	25.0	60.0	60.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	14.3%	39.3%	39.3%	17.9%	42.9%	42.9%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	61.6	61.6	61.6	61.6	61.6	64.1	45.7	45.7	49.1	36.4	36.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.46	0.33	0.33	0.35	0.26	0.26
v/c Ratio	0.39	0.13	0.10	0.47	0.44	0.19	0.75	0.04	0.83	0.68	0.02
Control Delay	26.5	3.8	26.9	31.4	9.6	24.1	46.7	0.1	61.3	25.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	3.8	26.9	31.4	9.6	24.1	46.7	0.1	61.3	25.7	0.0
LOS	C	A	C	C	A	C	D	A	E	C	A
Approach Delay	21.0			21.1			43.7			33.1	
Approach LOS	C			C			D			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 66 (47%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 31.7	Intersection LOS: C
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	294	94	39	356	343	76	819	23	158	573	7
Future Volume (veh/h)	0	294	94	39	356	343	76	819	23	158	573	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	0	313	-60	41	379	259	81	871	24	168	610	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	4	4	4
Cap, veh/h	51	702	595	405	702	595	516	1092	487	359	867	387
Arrive On Green	0.00	0.76	0.00	0.38	0.38	0.38	0.23	0.31	0.31	0.17	0.25	0.25
Sat Flow, veh/h	784	1856	1572	1118	1856	1572	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	0	313	-60	41	379	259	81	871	24	168	610	7
Grp Sat Flow(s),veh/h/ln	784	1856	1572	1118	1856	1572	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	0.0	8.7	0.0	3.6	22.3	17.2	0.0	31.5	1.5	6.6	22.2	0.5
Cycle Q Clear(g_c), s	0.0	8.7	0.0	12.3	22.3	17.2	0.0	31.5	1.5	6.6	22.2	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	702	595	405	702	595	516	1092	487	359	867	387
V/C Ratio(X)	0.00	0.45	-0.10	0.10	0.54	0.44	0.16	0.80	0.05	0.47	0.70	0.02
Avail Cap(c_a), veh/h	51	702	595	405	702	595	516	1218	543	359	1324	591
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.98	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.6	0.0	33.9	34.0	32.4	37.9	44.5	34.1	49.8	48.0	39.8
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.2	1.1	0.7	0.1	6.1	0.2	0.9	4.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	0.0	1.0	10.3	6.7	2.2	14.8	0.6	5.3	10.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.6	0.0	34.1	35.1	33.1	38.1	50.6	34.3	50.8	52.7	39.9
LnGrp LOS	A	B	A	C	D	C	D	D	C	D	D	D
Approach Vol, veh/h		253			679			976			785	
Approach Delay, s/veh		16.8			34.2			49.1			52.2	
Approach LOS		B			C			D			D	

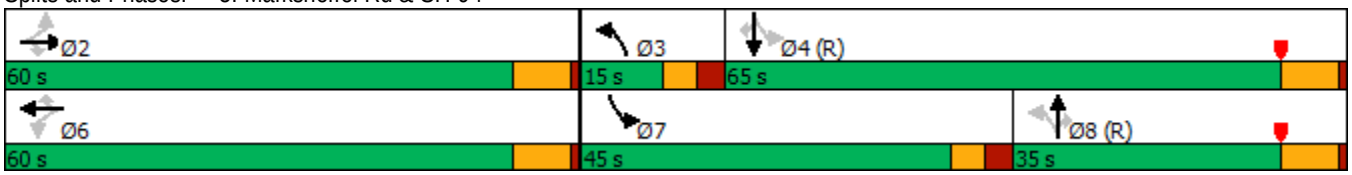
Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	60.0	38.3	41.7	60.0	30.0	50.0
Change Period (Y+Rc), s	7.0	6.5	7.0	7.0	6.5	7.0
Max Green Setting (Gmax), s	53.0	13.5	53.0	53.0	18.5	48.0
Max Q Clear Time (g_c+I1), s	10.7	2.0	24.2	24.3	8.6	33.5
Green Ext Time (p_c), s	3.0	0.1	10.4	5.5	0.3	9.5

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	300	160	35	345	90	190	445	25	280	675	5
Future Volume (vph)	300	160	35	345	90	190	445	25	280	675	5
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	11.5	17.0	17.0	12.5	17.0	17.0
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	35.0	35.0	45.0	65.0	65.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	10.7%	25.0%	25.0%	32.1%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	37.0	37.0	37.0	37.0	37.0	79.9	65.8	65.8	85.3	68.9	68.9
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.57	0.47	0.47	0.61	0.49	0.49
v/c Ratio	0.70	0.33	0.25	0.79	0.20	0.47	0.30	0.03	0.52	0.43	0.01
Control Delay	50.5	5.9	41.8	59.8	2.8	16.3	25.9	0.1	25.5	31.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.5	5.9	41.8	59.8	2.8	16.3	25.9	0.1	25.5	31.4	0.0
LOS	D	A	D	E	A	B	C	A	C	C	A
Approach Delay	35.0			47.5			22.2			29.5	
Approach LOS	C			D			C			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 19 (14%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 31.9	Intersection LOS: C
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	300	160	35	345	90	190	445	25	280	675	5
Future Volume (veh/h)	0	300	160	35	345	90	190	445	25	280	675	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1826	1826	1826	1856	1856	1856
Adj Flow Rate, veh/h	0	326	11	38	375	-11	207	484	27	304	734	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	6	6	6	5	5	5	3	3	3
Cap, veh/h	51	452	383	127	459	389	451	1728	771	599	1901	848
Arrive On Green	0.00	0.08	0.08	0.25	0.25	0.00	0.06	0.50	0.50	0.10	0.54	0.54
Sat Flow, veh/h	969	1781	1510	1010	1811	1535	1739	3469	1547	1767	3526	1572
Grp Volume(v), veh/h	0	326	11	38	375	-11	207	484	27	304	734	5
Grp Sat Flow(s),veh/h/ln	969	1781	1510	1010	1811	1535	1739	1735	1547	1767	1763	1572
Q Serve(g_s), s	0.0	25.0	0.9	5.1	27.3	0.0	8.3	11.4	1.2	11.4	17.0	0.2
Cycle Q Clear(g_c), s	0.0	25.0	0.9	30.0	27.3	0.0	8.3	11.4	1.2	11.4	17.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	452	383	127	459	389	451	1728	771	599	1901	848
V/C Ratio(X)	0.00	0.72	0.03	0.30	0.82	-0.03	0.46	0.28	0.04	0.51	0.39	0.01
Avail Cap(c_a), veh/h	173	674	572	254	686	581	451	1728	771	905	1901	848
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	59.3	48.3	62.2	49.2	0.0	16.1	20.5	18.0	13.8	18.8	14.9
Incr Delay (d2), s/veh	0.0	2.6	0.0	1.8	6.1	0.0	0.7	0.4	0.1	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.4	0.4	1.4	13.1	0.0	3.4	4.8	0.5	4.6	7.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	62.0	48.3	64.1	55.3	0.0	16.8	20.9	18.0	14.5	19.4	14.9
LnGrp LOS	A	E	D	E	E	A	B	C	B	B	B	B
Approach Vol, veh/h		337			402			718			1043	
Approach Delay, s/veh		61.5			57.6			19.6			17.9	
Approach LOS		E			E			B			B	

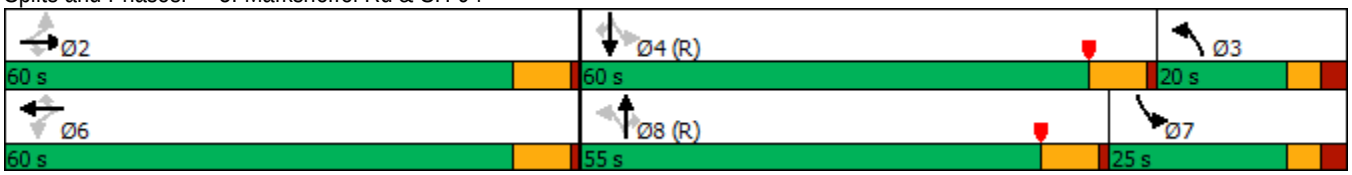
Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	42.5	15.0	82.5	42.5	20.8	76.7
Change Period (Y+Rc), s	7.0	6.5	7.0	7.0	6.5	7.0
Max Green Setting (Gmax), s	53.0	8.5	58.0	53.0	38.5	28.0
Max Q Clear Time (g_c+I1), s	27.0	10.3	19.0	32.0	13.4	13.4
Green Ext Time (p_c), s	3.0	0.0	14.7	3.5	0.9	5.8

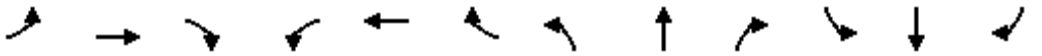
Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	340	265	45	405	375	225	1075	30	175	825	10
Future Volume (vph)	340	265	45	405	375	225	1075	30	175	825	10
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	11.5	17.5	17.5	12.5	17.5	17.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	20.0	55.0	55.0	25.0	60.0	60.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	14.3%	39.3%	39.3%	17.9%	42.9%	42.9%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	55.7	55.7	55.7	55.7	55.7	63.5	48.0	48.0	65.0	48.7	48.7
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.45	0.34	0.34	0.46	0.35	0.35
v/c Ratio	0.49	0.36	0.16	0.59	0.52	0.82	0.94	0.05	0.75	0.73	0.02
Control Delay	30.2	3.0	30.5	37.9	14.4	66.8	60.1	0.2	47.0	21.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	3.0	30.5	37.9	14.4	66.8	60.1	0.2	47.0	21.8	0.0
LOS	C	A	C	D	B	E	E	A	D	C	A
Approach Delay	18.3			26.8			59.9			26.0	
Approach LOS	B			C			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 66 (47%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 36.9	Intersection LOS: D
Intersection Capacity Utilization 93.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	340	265	45	405	375	225	1075	30	175	825	10
Future Volume (veh/h)	0	340	265	45	405	375	225	1075	30	175	825	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	0	362	122	48	431	293	239	1144	32	186	878	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	4	4	4
Cap, veh/h	51	702	595	323	702	595	380	1212	541	292	1137	507
Arrive On Green	0.00	0.76	0.76	0.38	0.38	0.38	0.15	0.34	0.34	0.13	0.33	0.33
Sat Flow, veh/h	724	1856	1572	904	1856	1572	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	0	362	122	48	431	293	239	1144	32	186	878	11
Grp Sat Flow(s),veh/h/ln	724	1856	1572	904	1856	1572	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	0.0	10.9	3.1	5.5	26.3	19.9	8.2	43.8	1.9	9.3	31.7	0.7
Cycle Q Clear(g_c), s	0.0	10.9	3.1	16.4	26.3	19.9	8.2	43.8	1.9	9.3	31.7	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	702	595	323	702	595	380	1212	541	292	1137	507
V/C Ratio(X)	0.00	0.52	0.20	0.15	0.61	0.49	0.63	0.94	0.06	0.64	0.77	0.02
Avail Cap(c_a), veh/h	51	702	595	323	702	595	380	1218	543	292	1324	591
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.9	10.9	36.1	35.2	33.2	50.3	44.8	31.0	55.1	42.6	32.1
Incr Delay (d2), s/veh	0.0	2.5	0.7	0.3	1.9	0.9	3.3	15.4	0.2	4.6	5.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	1.2	1.3	12.3	7.8	8.0	21.8	0.8	6.5	14.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.4	11.7	36.4	37.1	34.1	53.6	60.2	31.2	59.6	47.7	32.2
LnGrp LOS	A	B	B	D	D	C	D	E	C	E	D	C
Approach Vol, veh/h		484			772			1415			1075	
Approach Delay, s/veh		13.7			35.9			58.5			49.6	
Approach LOS		B			D			E			D	

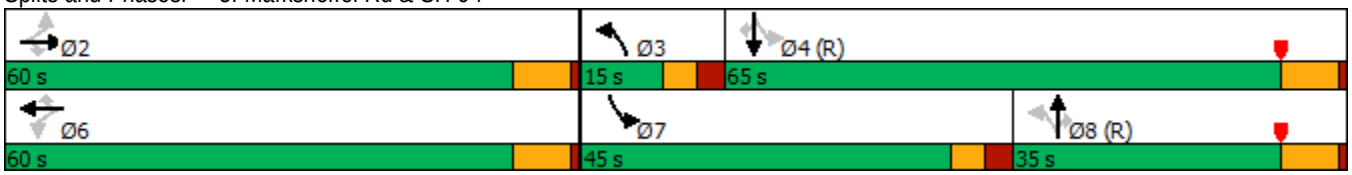
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		60.0	27.5	52.5		60.0	25.2	54.8				
Change Period (Y+Rc), s		7.0	6.5	7.0		7.0	6.5	7.0				
Max Green Setting (Gmax), s		53.0	13.5	53.0		53.0	18.5	48.0				
Max Q Clear Time (g_c+I1), s		12.9	10.2	33.7		28.3	11.3	45.8				
Green Ext Time (p_c), s		4.3	0.2	11.8		6.3	0.3	2.0				

Intersection Summary												
HCM 6th Ctrl Delay			45.5									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	300	160	35	345	115	190	470	25	300	695	245
Future Volume (vph)	150	300	160	35	345	115	190	470	25	300	695	245
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	6	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	27.0	11.5	17.0	17.0	12.5	17.0	17.0
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0	15.0	35.0	35.0	45.0	65.0	65.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	10.7%	25.0%	25.0%	32.1%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	41.7	41.7	41.7	41.7	41.7	41.7	70.6	58.5	58.5	82.0	66.2	66.2
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.30	0.50	0.42	0.42	0.59	0.47	0.47
v/c Ratio	1.06	0.62	0.31	0.20	0.70	0.23	0.53	0.36	0.04	0.60	0.46	0.30
Control Delay	127.7	44.2	5.4	35.2	50.0	5.1	24.8	32.5	0.1	27.8	33.1	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.7	44.2	5.4	35.2	50.0	5.1	24.8	32.5	0.1	27.8	33.1	9.5
LOS	F	D	A	D	D	A	C	C	A	C	C	A
Approach Delay		54.6			38.5			29.2			27.2	
Approach LOS		D			D			C			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 19 (14%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 35.0	Intersection LOS: C
Intersection Capacity Utilization 87.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	300	160	35	345	115	190	470	25	300	695	245
Future Volume (veh/h)	150	300	160	35	345	115	190	470	25	300	695	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1826	1826	1826	1856	1856	1856
Adj Flow Rate, veh/h	163	326	11	38	375	16	207	511	27	326	755	266
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	6	6	6	5	5	5	3	3	3
Cap, veh/h	235	644	546	243	654	555	306	1247	556	500	1521	679
Arrive On Green	0.12	0.12	0.12	0.36	0.36	0.36	0.06	0.36	0.36	0.13	0.43	0.43
Sat Flow, veh/h	946	1781	1510	1010	1811	1535	1739	3469	1547	1767	3526	1572
Grp Volume(v), veh/h	163	326	11	38	375	16	207	511	27	326	755	266
Grp Sat Flow(s),veh/h/ln	946	1781	1510	1010	1811	1535	1739	1735	1547	1767	1763	1572
Q Serve(g_s), s	23.9	24.0	0.9	4.4	23.3	0.9	8.5	15.5	1.6	15.6	21.7	16.2
Cycle Q Clear(g_c), s	47.3	24.0	0.9	28.4	23.3	0.9	8.5	15.5	1.6	15.6	21.7	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	644	546	243	654	555	306	1247	556	500	1521	679
V/C Ratio(X)	0.69	0.51	0.02	0.16	0.57	0.03	0.68	0.41	0.05	0.65	0.50	0.39
Avail Cap(c_a), veh/h	252	674	572	261	686	581	306	1247	556	751	1521	679
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	49.9	39.8	47.7	36.0	28.9	30.5	33.7	29.2	22.7	28.8	27.2
Incr Delay (d2), s/veh	6.7	0.7	0.0	0.4	1.4	0.0	5.8	1.0	0.2	1.4	1.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	11.7	0.3	1.2	10.6	0.4	2.3	6.8	0.6	6.7	9.5	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.5	50.7	39.8	48.2	37.4	28.9	36.3	34.7	29.4	24.1	29.9	28.9
LnGrp LOS	E	D	D	D	D	C	D	C	C	C	C	C
Approach Vol, veh/h		500			429			745			1347	
Approach Delay, s/veh		59.5			38.0			34.9			28.3	
Approach LOS		E			D			C			C	

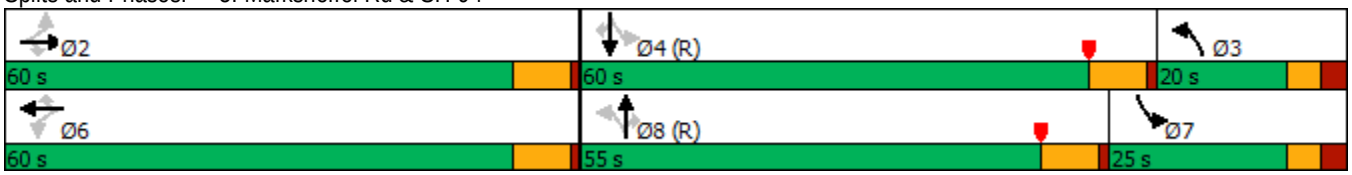
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		57.6	15.0	67.4		57.6	25.1	57.3				
Change Period (Y+Rc), s		7.0	6.5	7.0		7.0	6.5	7.0				
Max Green Setting (Gmax), s		53.0	8.5	58.0		53.0	38.5	28.0				
Max Q Clear Time (g_c+I1), s		49.3	10.5	23.7		30.4	17.6	17.5				
Green Ext Time (p_c), s		1.3	0.0	18.0		3.6	1.0	4.8				

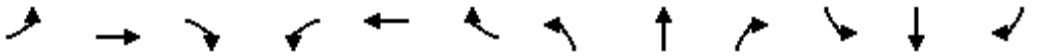
Intersection Summary												
HCM 6th Ctrl Delay			36.5									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	340	265	45	405	395	225	1100	30	200	845	255
Future Volume (vph)	140	340	265	45	405	395	225	1100	30	200	845	255
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	6	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	11.5	17.5	17.5	12.5	17.5	17.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0	20.0	55.0	55.0	25.0	60.0	60.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	14.3%	39.3%	39.3%	17.9%	42.9%	42.9%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag							Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	54.3	54.3	54.3	54.3	54.3	54.3	62.6	48.0	48.0	68.8	51.1	51.1
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.45	0.34	0.34	0.49	0.36	0.36
v/c Ratio	0.65	0.51	0.36	0.17	0.60	0.55	0.86	0.96	0.05	0.80	0.71	0.38
Control Delay	45.7	31.9	3.4	31.0	39.0	16.2	73.5	63.8	0.2	56.5	25.2	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	31.9	3.4	31.0	39.0	16.2	73.5	63.8	0.2	56.5	25.2	3.4
LOS	D	C	A	C	D	B	E	E	A	E	C	A
Approach Delay		24.3			27.9			64.0			25.7	
Approach LOS		C			C			E			C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 66 (47%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 38.1	Intersection LOS: D
Intersection Capacity Utilization 102.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	340	265	45	405	395	225	1100	30	200	845	255
Future Volume (veh/h)	140	340	265	45	405	395	225	1100	30	200	845	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	149	362	122	48	431	314	239	1170	32	213	899	271
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	4	4	4
Cap, veh/h	187	702	595	298	702	595	345	1217	543	292	1191	531
Arrive On Green	0.63	0.63	0.63	0.38	0.38	0.38	0.13	0.34	0.34	0.13	0.34	0.34
Sat Flow, veh/h	710	1856	1572	904	1856	1572	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	149	362	122	48	431	314	239	1170	32	213	899	271
Grp Sat Flow(s),veh/h/ln	710	1856	1572	904	1856	1572	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	26.7	14.9	4.6	5.7	26.3	21.7	9.2	45.2	1.9	11.4	31.9	19.4
Cycle Q Clear(g_c), s	53.0	14.9	4.6	20.6	26.3	21.7	9.2	45.2	1.9	11.4	31.9	19.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	702	595	298	702	595	345	1217	543	292	1191	531
V/C Ratio(X)	0.80	0.52	0.20	0.16	0.61	0.53	0.69	0.96	0.06	0.73	0.76	0.51
Avail Cap(c_a), veh/h	187	702	595	298	702	595	345	1218	543	292	1324	591
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	18.7	16.8	39.2	35.2	33.8	52.6	45.1	30.9	56.0	41.0	36.9
Incr Delay (d2), s/veh	26.1	2.4	0.7	0.4	1.9	1.2	5.9	18.1	0.2	8.9	4.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	5.6	1.7	1.3	12.3	8.5	8.4	22.9	0.8	7.9	14.5	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	21.1	17.5	39.5	37.1	34.9	58.5	63.2	31.1	64.9	45.5	40.3
LnGrp LOS	E	C	B	D	D	C	E	E	C	E	D	D
Approach Vol, veh/h		633			793			1441			1383	
Approach Delay, s/veh		31.0			36.4			61.7			47.5	
Approach LOS		C			D			E			D	

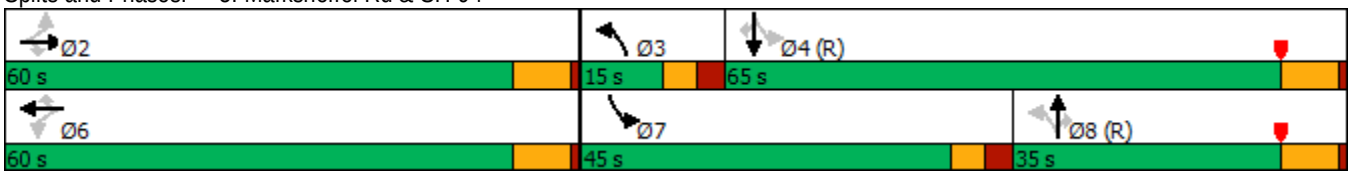
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		60.0	25.3	54.7		60.0	25.1	54.9				
Change Period (Y+Rc), s		7.0	6.5	7.0		7.0	6.5	7.0				
Max Green Setting (Gmax), s		53.0	13.5	53.0		53.0	18.5	48.0				
Max Q Clear Time (g_c+I1), s		55.0	11.2	33.9		28.3	13.4	47.2				
Green Ext Time (p_c), s		0.0	0.2	13.7		6.4	0.3	0.7				

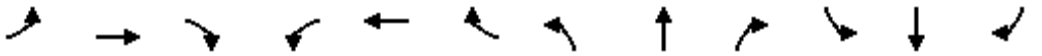
Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	350	310	40	405	105	430	780	30	330	950	5
Future Volume (vph)	350	310	40	405	105	430	780	30	330	950	5
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	11.5	17.0	17.0	12.5	17.0	17.0
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	35.0	35.0	45.0	65.0	65.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	10.7%	25.0%	25.0%	32.1%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	42.2	42.2	42.2	42.2	42.2	68.2	49.8	49.8	78.8	58.0	58.0
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.49	0.36	0.36	0.56	0.41	0.41
v/c Ratio	0.72	0.58	0.27	0.81	0.21	1.37	0.69	0.05	0.79	0.71	0.01
Control Delay	48.1	18.4	39.0	57.2	3.9	214.7	44.6	0.1	59.2	41.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	18.4	39.0	57.2	3.9	214.7	44.6	0.1	59.2	41.3	0.0
LOS	D	B	D	E	A	F	D	A	E	D	A
Approach Delay	34.1			45.7			102.5			45.7	
Approach LOS	C			D			F			D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 19 (14%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 62.5	Intersection LOS: E
Intersection Capacity Utilization 100.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	350	310	40	405	105	430	780	30	330	950	5
Future Volume (veh/h)	0	350	310	40	405	105	430	780	30	330	950	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1826	1826	1826	1856	1856	1856
Adj Flow Rate, veh/h	0	380	174	43	440	5	467	848	33	359	1033	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	6	6	6	5	5	5	3	3	3
Cap, veh/h	51	530	449	126	539	456	333	1460	651	410	1747	779
Arrive On Green	0.00	0.10	0.10	0.30	0.30	0.30	0.02	0.14	0.14	0.18	0.66	0.66
Sat Flow, veh/h	900	1781	1510	827	1811	1535	1739	3469	1547	1767	3526	1572
Grp Volume(v), veh/h	0	380	174	43	440	5	467	848	33	359	1033	5
Grp Sat Flow(s),veh/h/ln	900	1781	1510	827	1811	1535	1739	1735	1547	1767	1763	1572
Q Serve(g_s), s	0.0	29.0	15.1	7.0	31.6	0.3	8.5	32.1	2.6	15.9	22.9	0.2
Cycle Q Clear(g_c), s	0.0	29.0	15.1	36.0	31.6	0.3	8.5	32.1	2.6	15.9	22.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	530	449	126	539	456	333	1460	651	410	1747	779
V/C Ratio(X)	0.00	0.72	0.39	0.34	0.82	0.01	1.40	0.58	0.05	0.87	0.59	0.01
Avail Cap(c_a), veh/h	124	674	572	193	686	581	333	1460	651	657	1747	779
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.00	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	0.0	57.4	51.2	61.1	45.6	34.7	38.0	48.7	36.0	23.6	16.0	12.1
Incr Delay (d2), s/veh	0.0	2.5	0.6	2.3	6.9	0.0	198.2	1.7	0.1	6.8	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.3	6.2	1.6	15.2	0.1	26.2	15.4	1.0	6.6	8.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	60.0	51.8	63.3	52.6	34.7	236.2	50.4	36.2	30.3	17.2	12.1
LnGrp LOS	A	E	D	E	D	C	F	D	D	C	B	B
Approach Vol, veh/h		554			488			1348			1397	
Approach Delay, s/veh		57.4			53.3			114.4			20.6	
Approach LOS		E			D			F			C	

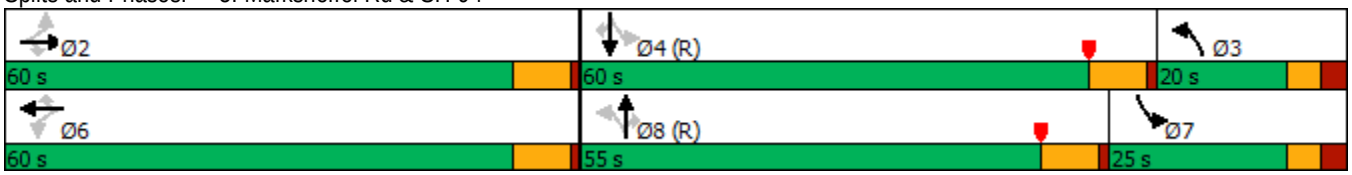
Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	48.6	15.0	76.4	48.6	25.4	65.9
Change Period (Y+Rc), s	7.0	6.5	7.0	7.0	6.5	7.0
Max Green Setting (Gmax), s	53.0	8.5	58.0	53.0	38.5	28.0
Max Q Clear Time (g_c+I1), s	31.0	10.5	24.9	38.0	17.9	34.1
Green Ext Time (p_c), s	4.3	0.0	19.8	3.7	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.6
HCM 6th LOS	E

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	400	665	50	475	440	565	1695	50	205	1455	10
Future Volume (vph)	400	665	50	475	440	565	1695	50	205	1455	10
Turn Type	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	2			6		3	8		7	4	
Permitted Phases		2	6		6	8		8	4		4
Detector Phase	2	2	6	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	5.0	10.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	11.5	17.5	17.5	12.5	17.5	17.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	20.0	55.0	55.0	25.0	60.0	60.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	14.3%	39.3%	39.3%	17.9%	42.9%	42.9%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	3.5	6.0	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	3.0	1.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.0	6.5	7.0	7.0
Lead/Lag						Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	53.0	53.0	53.0	53.0	53.0	62.0	48.0	48.0	72.0	53.0	53.0
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.44	0.34	0.34	0.51	0.38	0.38
v/c Ratio	0.61	0.95	0.24	0.72	0.63	2.68	1.49	0.09	0.78	1.18	0.02
Control Delay	35.2	45.4	33.4	44.4	20.7	779.7	252.2	3.3	45.0	118.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	45.4	33.4	44.4	20.7	779.7	252.2	3.3	45.0	118.1	0.0
LOS	D	D	C	D	C	F	F	A	D	F	A
Approach Delay	41.6			33.0			375.9			108.4	
Approach LOS	D			C			F			F	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 66 (47%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.68	
Intersection Signal Delay: 187.3	Intersection LOS: F
Intersection Capacity Utilization 130.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	400	665	50	475	440	565	1695	50	205	1455	10
Future Volume (veh/h)	0	400	665	50	475	440	565	1695	50	205	1455	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	0	426	547	53	505	362	601	1803	53	218	1548	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	4	4	4
Cap, veh/h	51	702	595	190	702	595	223	1218	543	283	1324	591
Arrive On Green	0.00	0.63	0.63	0.38	0.38	0.38	0.13	0.46	0.46	0.13	0.38	0.38
Sat Flow, veh/h	633	1856	1572	573	1856	1572	1781	3554	1585	1753	3497	1560
Grp Volume(v), veh/h	0	426	547	53	505	362	601	1803	53	218	1548	11
Grp Sat Flow(s),veh/h/ln	633	1856	1572	573	1856	1572	1781	1777	1585	1753	1749	1560
Q Serve(g_s), s	0.0	19.2	42.7	10.8	32.5	26.0	13.5	48.0	2.7	12.6	53.0	0.6
Cycle Q Clear(g_c), s	0.0	19.2	42.7	30.0	32.5	26.0	13.5	48.0	2.7	12.6	53.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	702	595	190	702	595	223	1218	543	283	1324	591
V/C Ratio(X)	0.00	0.61	0.92	0.28	0.72	0.61	2.69	1.48	0.10	0.77	1.17	0.02
Avail Cap(c_a), veh/h	51	702	595	190	702	595	223	1218	543	283	1324	591
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	0.0	19.5	23.9	44.4	37.1	35.1	59.5	38.1	25.7	56.7	43.5	27.2
Incr Delay (d2), s/veh	0.0	2.7	16.5	1.1	3.9	2.1	774.3	220.4	0.4	10.6	83.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.1	15.1	1.6	15.5	10.4	55.4	56.7	1.1	7.9	38.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.2	40.4	45.5	41.0	37.2	833.8	258.5	26.1	67.3	127.0	27.3
LnGrp LOS	A	C	D	D	D	D	F	F	C	E	F	C
Approach Vol, veh/h		973			920			2457			1777	
Approach Delay, s/veh		32.4			39.8			394.2			119.1	
Approach LOS		C			D			F			F	

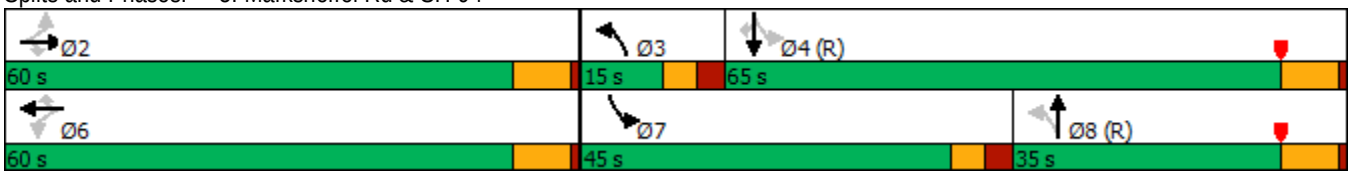
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		60.0	20.0	60.0		60.0	25.0	55.0				
Change Period (Y+Rc), s		7.0	6.5	7.0		7.0	6.5	7.0				
Max Green Setting (Gmax), s		53.0	13.5	53.0		53.0	18.5	48.0				
Max Q Clear Time (g_c+I1), s		44.7	15.5	55.0		34.5	14.6	50.0				
Green Ext Time (p_c), s		4.2	0.0	0.0		7.1	0.2	0.0				

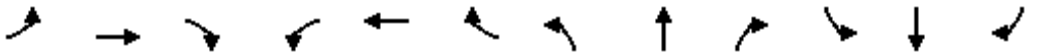
Intersection Summary												
HCM 6th Ctrl Delay			203.7									
HCM 6th LOS			F									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	165	350	310	40	405	135	430	810	355	975	275
Future Volume (vph)	165	350	310	40	405	135	430	810	355	975	275
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		2			6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	2	2	2	6	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	20.0	5.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	27.0	11.5	17.0	12.5	17.0	17.0
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0	15.0	35.0	45.0	65.0	65.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	10.7%	25.0%	32.1%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.5	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	6.5	7.0	7.0
Lead/Lag							Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	41.3	41.3	41.3	41.3	41.3	41.3	67.1	49.2	80.3	59.6	59.6
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.30	0.48	0.35	0.57	0.43	0.43
v/c Ratio	0.85	0.39	0.59	0.18	0.44	0.27	0.64	0.53	0.78	0.49	0.38
Control Delay	70.1	37.5	18.7	34.3	40.1	5.5	28.2	36.5	45.3	44.9	24.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	37.5	18.7	34.3	40.1	5.5	28.2	36.5	45.3	44.9	24.9
LOS	E	D	B	C	D	A	C	D	D	D	C
Approach Delay		37.0			31.6			33.7		41.6	
Approach LOS		D			C			C		D	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 19 (14%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 37.0	Intersection LOS: D
Intersection Capacity Utilization 92.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	350	310	40	405	135	430	810	30	355	975	275
Future Volume (veh/h)	165	350	310	40	405	135	430	810	30	355	975	275
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1826	1826	1826	1856	1856	1856
Adj Flow Rate, veh/h	179	380	174	43	440	38	467	880	0	386	1060	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	6	6	6	5	5	5	3	3	3
Cap, veh/h	264	1151	513	247	1170	522	656	1721		468	2294	
Arrive On Green	0.11	0.11	0.11	0.34	0.34	0.34	0.04	0.23	0.00	0.34	0.91	0.00
Sat Flow, veh/h	873	3385	1510	827	3441	1535	3374	5149	0	1767	5066	1572
Grp Volume(v), veh/h	179	380	174	43	440	38	467	880	0	386	1060	0
Grp Sat Flow(s),veh/h/ln	873	1692	1510	827	1721	1535	1687	1662	0	1767	1689	1572
Q Serve(g_s), s	28.3	14.5	14.9	5.9	13.5	2.3	8.5	21.5	0.0	20.5	4.8	0.0
Cycle Q Clear(g_c), s	41.9	14.5	14.9	20.4	13.5	2.3	8.5	21.5	0.0	20.5	4.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1151	513	247	1170	522	656	1721		468	2294	
V/C Ratio(X)	0.68	0.33	0.34	0.17	0.38	0.07	0.71	0.51		0.82	0.46	
Avail Cap(c_a), veh/h	297	1281	572	279	1303	581	656	1721		657	2294	
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	0.00	0.83	0.83	0.00
Uniform Delay (d), s/veh	66.3	47.4	47.6	43.0	35.0	31.3	31.4	43.5	0.0	19.4	3.8	0.0
Incr Delay (d2), s/veh	4.2	0.2	0.4	0.5	0.3	0.1	3.6	1.1	0.0	5.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	6.6	6.1	1.2	5.8	0.9	2.6	9.5	0.0	6.7	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.5	47.6	48.0	43.5	35.2	31.3	35.0	44.6	0.0	24.4	4.4	0.0
LnGrp LOS	E	D	D	D	D	C	C	D		C	A	
Approach Vol, veh/h		733			521			1347			1446	
Approach Delay, s/veh		53.3			35.6			41.3			9.7	
Approach LOS		D			D			D			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		54.6	15.0	70.4		54.6	30.0	55.3				
Change Period (Y+Rc), s		7.0	6.5	7.0		7.0	6.5	7.0				
Max Green Setting (Gmax), s		53.0	8.5	58.0		53.0	38.5	28.0				
Max Q Clear Time (g_c+I1), s		43.9	10.5	6.8		22.4	22.5	23.5				
Green Ext Time (p_c), s		3.7	0.0	25.2		5.1	1.1	3.4				

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

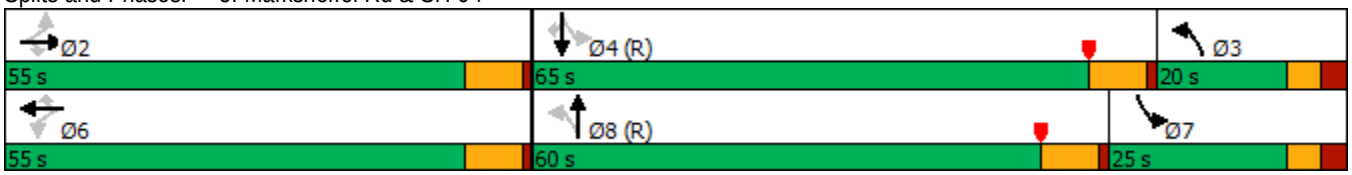
Notes

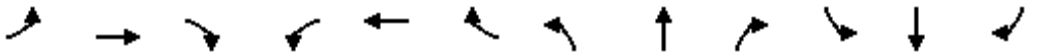
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	235	400	665	50	475	480	565	1735	230	1480	285
Future Volume (vph)	235	400	665	50	475	480	565	1735	230	1480	285
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		2			6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	2	2	2	6	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0	20.0	5.0	10.0	6.0	10.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	11.5	17.5	12.5	17.5	17.5
Total Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	20.0	60.0	25.0	65.0	65.0
Total Split (%)	39.3%	39.3%	39.3%	39.3%	39.3%	39.3%	14.3%	42.9%	17.9%	46.4%	46.4%
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.5	6.0	3.5	6.0	6.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	3.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	6.5	7.0	7.0
Lead/Lag							Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	67.0	53.0	77.0	58.0	58.0
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.48	0.38	0.55	0.41	0.41
v/c Ratio	1.04	0.35	1.03	0.19	0.42	0.75	1.38	0.99	0.87	0.76	0.42
Control Delay	103.4	37.7	68.2	34.7	36.6	30.0	208.1	46.6	57.2	26.3	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.4	37.7	68.2	34.7	36.6	30.0	208.1	46.6	57.2	26.3	14.3
LOS	F	D	E	C	D	C	F	D	E	C	B
Approach Delay		65.2			33.4			85.4		28.2	
Approach LOS		E			C			F		C	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 66 (47%), Referenced to phase 4:SBTL and 8:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	
Intersection Signal Delay: 56.4	Intersection LOS: E
Intersection Capacity Utilization 103.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Marksheffel Rd & SH-94





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	400	665	50	475	480	565	1735	50	230	1480	285
Future Volume (veh/h)	235	400	665	50	475	480	565	1735	50	230	1480	285
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	250	426	361	53	505	245	601	1846	0	245	1574	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	4	4	4
Cap, veh/h	216	1209	539	241	1209	539	550	1926		299	2011	
Arrive On Green	0.57	0.57	0.57	0.34	0.34	0.34	0.22	0.75	0.00	0.13	0.40	0.00
Sat Flow, veh/h	707	3526	1572	683	3526	1572	3456	5274	0	1753	5025	1560
Grp Volume(v), veh/h	250	426	361	53	505	245	601	1846	0	245	1574	0
Grp Sat Flow(s),veh/h/ln	707	1763	1572	683	1763	1572	1728	1702	0	1753	1675	1560
Q Serve(g_s), s	32.6	9.1	22.3	8.5	15.4	17.0	15.5	44.9	0.0	13.6	38.3	0.0
Cycle Q Clear(g_c), s	48.0	9.1	22.3	17.6	15.4	17.0	15.5	44.9	0.0	13.6	38.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	1209	539	241	1209	539	550	1926		299	2011	
V/C Ratio(X)	1.16	0.35	0.67	0.22	0.42	0.45	1.09	0.96		0.82	0.78	
Avail Cap(c_a), veh/h	216	1209	539	241	1209	539	550	1933		299	2082	
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	0.00	0.80	0.80	0.00
Uniform Delay (d), s/veh	41.5	21.6	24.4	39.5	35.3	35.8	51.3	16.2	0.0	56.4	36.7	0.0
Incr Delay (d2), s/veh	93.8	0.4	3.3	0.6	0.3	0.9	65.8	12.8	0.0	13.3	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	3.5	7.4	1.5	6.7	6.7	13.4	10.7	0.0	9.5	16.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	135.3	22.0	27.7	40.2	35.6	36.7	117.1	29.0	0.0	69.7	39.2	0.0
LnGrp LOS	F	C	C	D	D	D	F	C		E	D	
Approach Vol, veh/h		1037			803			2447			1819	
Approach Delay, s/veh		51.3			36.2			50.7			43.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	55.0	22.0	63.0	55.0	25.2	59.8
Change Period (Y+Rc), s	7.0	6.5	7.0	7.0	6.5	7.0
Max Green Setting (Gmax), s	48.0	13.5	58.0	48.0	18.5	53.0
Max Q Clear Time (g_c+I1), s	50.0	17.5	40.3	19.6	15.6	46.9
Green Ext Time (p_c), s	0.0	0.0	15.7	7.4	0.2	5.9

Intersection Summary	
HCM 6th Ctrl Delay	46.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	90	90	50	775	1300	200
Future Vol, veh/h	90	90	50	775	1300	200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	98	98	54	842	1413	217

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1942	707	1630	0	-	0
Stage 1	1413	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*~ 80	378	394	-	-	-
Stage 1	*191	-	-	-	-	-
Stage 2	*720	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*~ 69	378	394	-	-	-
Mov Cap-2 Maneuver	*139	-	-	-	-	-
Stage 1	*165	-	-	-	-	-
Stage 2	*720	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.3	0.9	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	394	-	139	378	-	-
HCM Lane V/C Ratio	0.138	-	0.704	0.259	-	-
HCM Control Delay (s)	15.6	-	76.7	17.8	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.5	-	4	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	90	90	50	1365	1045	185
Future Vol, veh/h	90	90	50	1365	1045	185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	98	98	54	1484	1136	201

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1986	568	1337	0	-	0
Stage 1	1136	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 53	466	512	-	-	-
Stage 1	268	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 47	466	512	-	-	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	240	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.5	0.5	0
HCM LOS	E		

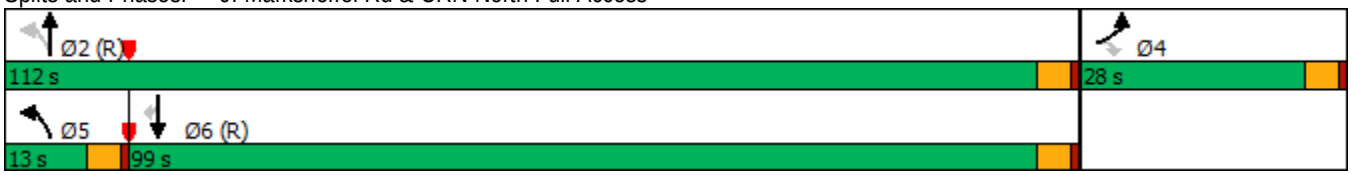
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	512	-	154	466	-	-
HCM Lane V/C Ratio	0.106	-	0.635	0.21	-	-
HCM Control Delay (s)	12.9	-	62.1	14.8	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	3.5	0.8	-	-

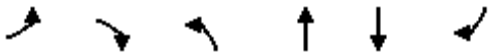
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	90	90	50	775	1300	200
Future Volume (vph)	90	90	50	775	1300	200
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	28.0	28.0	13.0	112.0	99.0	99.0
Total Split (%)	20.0%	20.0%	9.3%	80.0%	70.7%	70.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	13.1	13.1	117.9	117.9	109.2	109.2
Actuated g/C Ratio	0.09	0.09	0.84	0.84	0.78	0.78
v/c Ratio	0.59	0.42	0.18	0.29	0.53	0.17
Control Delay	74.9	15.6	2.7	1.7	21.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	15.6	2.7	1.7	21.5	6.8
LOS	E	B	A	A	C	A
Approach Delay	45.3			1.8	19.5	
Approach LOS	D			A	B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Marksheffel Rd & CRN North Full Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	90	50	775	1300	200
Future Volume (veh/h)	90	90	50	775	1300	200
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	1826	1826	1870
Adj Flow Rate, veh/h	98	98	54	842	1413	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	139	124	309	2975	2755	1259
Arrive On Green	0.08	0.08	0.06	1.00	0.79	0.79
Sat Flow, veh/h	1781	1585	1781	3561	3561	1585
Grp Volume(v), veh/h	98	98	54	842	1413	217
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1735	1735	1585
Q Serve(g_s), s	7.5	8.5	0.7	0.0	19.8	4.6
Cycle Q Clear(g_c), s	7.5	8.5	0.7	0.0	19.8	4.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	139	124	309	2975	2755	1259
V/C Ratio(X)	0.70	0.79	0.17	0.28	0.51	0.17
Avail Cap(c_a), veh/h	299	266	361	2975	2755	1259
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	62.9	63.4	3.8	0.0	5.0	3.4
Incr Delay (d2), s/veh	6.3	10.7	0.3	0.2	0.7	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	3.7	7.7	0.2	0.1	6.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	69.3	74.1	4.0	0.2	5.7	3.7
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	196			896	1630	
Approach Delay, s/veh	71.7			0.5	5.4	
Approach LOS	E			A	A	

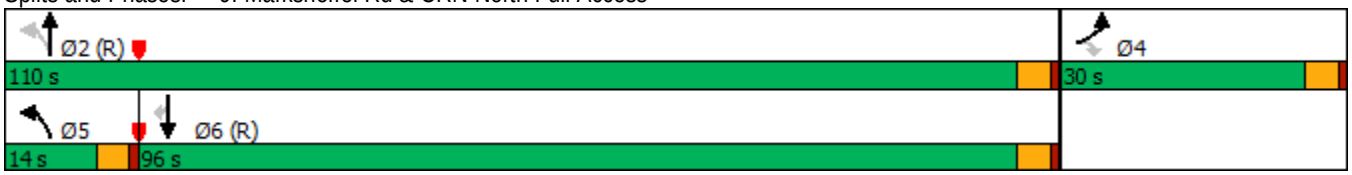
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		124.6		15.4	8.9	115.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		107.5		23.5	8.5	94.5
Max Q Clear Time (g_c+I1), s		2.0		10.5	2.7	21.8
Green Ext Time (p_c), s		7.5		0.4	0.0	19.6

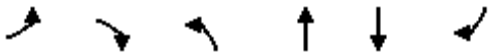
Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	90	90	50	1365	1045	185
Future Volume (vph)	90	90	50	1365	1045	185
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	30.0	30.0	14.0	110.0	96.0	96.0
Total Split (%)	21.4%	21.4%	10.0%	78.6%	68.6%	68.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	13.1	13.1	117.9	117.9	109.2	109.2
Actuated g/C Ratio	0.09	0.09	0.84	0.84	0.78	0.78
v/c Ratio	0.59	0.42	0.14	0.50	0.42	0.16
Control Delay	74.9	15.5	3.9	5.1	4.0	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	15.5	3.9	5.1	4.0	0.6
LOS	E	B	A	A	A	A
Approach Delay	45.2			5.1	3.5	
Approach LOS	D			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 7.0	Intersection LOS: A
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Marksheffel Rd & CRN North Full Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	90	50	1365	1045	185
Future Volume (veh/h)	90	90	50	1365	1045	185
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	1856	1856	1870
Adj Flow Rate, veh/h	98	98	54	1484	1136	201
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	140	124	392	3023	2799	1258
Arrive On Green	0.08	0.08	0.06	1.00	0.79	0.79
Sat Flow, veh/h	1781	1585	1781	3618	3618	1585
Grp Volume(v), veh/h	98	98	54	1484	1136	201
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1763	1763	1585
Q Serve(g_s), s	7.5	8.5	0.7	0.0	13.7	4.2
Cycle Q Clear(g_c), s	7.5	8.5	0.7	0.0	13.7	4.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	140	124	392	3023	2799	1258
V/C Ratio(X)	0.70	0.79	0.14	0.49	0.41	0.16
Avail Cap(c_a), veh/h	324	289	457	3023	2799	1258
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	62.9	63.4	2.8	0.0	4.4	3.4
Incr Delay (d2), s/veh	6.3	10.5	0.1	0.5	0.4	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	3.7	7.7	0.2	0.2	4.5	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	69.2	73.9	2.9	0.5	4.8	3.7
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	196			1538	1337	
Approach Delay, s/veh	71.5			0.6	4.7	
Approach LOS	E			A	A	

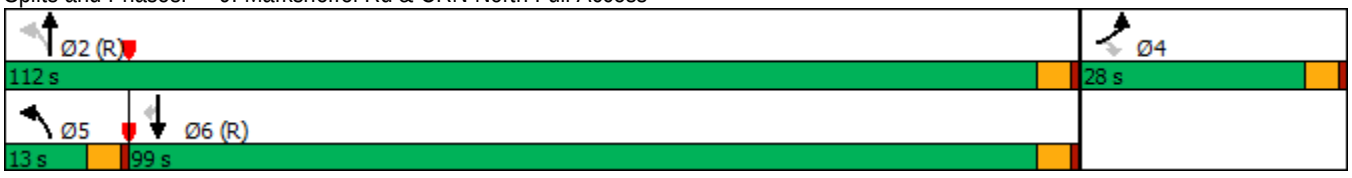
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		124.5		15.5	8.9	115.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		105.5		25.5	9.5	91.5
Max Q Clear Time (g_c+I1), s		2.0		10.5	2.7	15.7
Green Ext Time (p_c), s		19.9		0.5	0.0	13.2

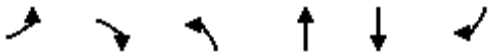
Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	100	55	1160	1675	220
Future Volume (vph)	100	100	55	1160	1675	220
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	28.0	28.0	13.0	112.0	99.0	99.0
Total Split (%)	20.0%	20.0%	9.3%	80.0%	70.7%	70.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	13.9	13.9	117.1	117.1	108.3	108.3
Actuated g/C Ratio	0.10	0.10	0.84	0.84	0.77	0.77
v/c Ratio	0.62	0.43	0.27	0.31	0.48	0.19
Control Delay	75.3	14.8	9.7	1.4	19.9	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.3	14.8	9.7	1.4	19.9	7.6
LOS	E	B	A	A	B	A
Approach Delay	45.1			1.8	18.5	
Approach LOS	D			A	B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Marksheffel Rd & CRN North Full Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	100	55	1160	1675	220
Future Volume (veh/h)	100	100	55	1160	1675	220
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	1826	1826	1870
Adj Flow Rate, veh/h	109	109	60	1261	1821	239
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	152	135	243	4239	3918	1246
Arrive On Green	0.09	0.09	0.06	1.00	0.79	0.79
Sat Flow, veh/h	1781	1585	1781	5149	5149	1585
Grp Volume(v), veh/h	109	109	60	1261	1821	239
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1662	1662	1585
Q Serve(g_s), s	8.3	9.5	0.8	0.0	17.2	5.3
Cycle Q Clear(g_c), s	8.3	9.5	0.8	0.0	17.2	5.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	152	135	243	4239	3918	1246
V/C Ratio(X)	0.72	0.81	0.25	0.30	0.46	0.19
Avail Cap(c_a), veh/h	299	266	294	4239	3918	1246
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.56	0.56
Uniform Delay (d), s/veh	62.4	62.9	3.8	0.0	5.1	3.8
Incr Delay (d2), s/veh	6.2	10.6	0.5	0.2	0.2	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	4.1	8.5	0.2	0.1	5.3	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	68.6	73.5	4.3	0.2	5.3	4.0
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	218			1321	2060	
Approach Delay, s/veh	71.1			0.4	5.1	
Approach LOS	E			A	A	

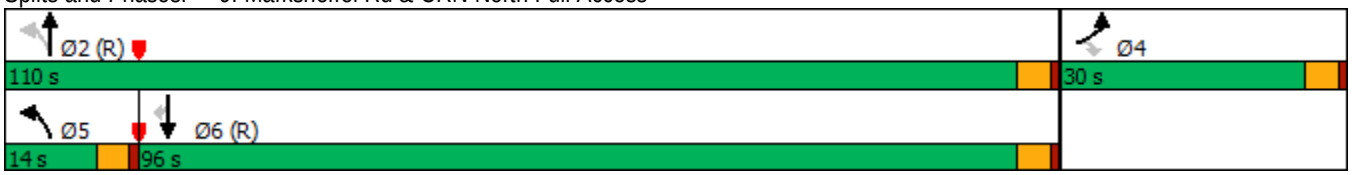
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.6		16.4	9.0	114.5
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		107.5		23.5	8.5	94.5
Max Q Clear Time (g_c+I1), s		2.0		11.5	2.8	19.2
Green Ext Time (p_c), s		13.7		0.5	0.0	29.8

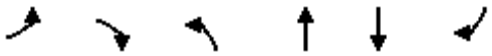
Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	100	80	2025	1760	310
Future Volume (vph)	100	100	80	2025	1760	310
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	30.0	30.0	14.0	110.0	96.0	96.0
Total Split (%)	21.4%	21.4%	10.0%	78.6%	68.6%	68.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	13.9	13.9	117.1	117.1	105.6	105.6
Actuated g/C Ratio	0.10	0.10	0.84	0.84	0.75	0.75
v/c Ratio	0.62	0.43	0.42	0.52	0.50	0.26
Control Delay	75.2	14.8	14.0	5.0	5.9	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	14.8	14.0	5.0	5.9	1.2
LOS	E	B	B	A	A	A
Approach Delay	45.0			5.3	5.2	
Approach LOS	D			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 7.1	Intersection LOS: A
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: Marksheffel Rd & CRN North Full Access





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	100	80	2025	1760	310
Future Volume (veh/h)	100	100	80	2025	1760	310
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	1856	1856	1870
Adj Flow Rate, veh/h	109	109	87	2201	1913	337
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	152	136	223	4307	3969	1242
Arrive On Green	0.09	0.09	0.07	1.00	0.78	0.78
Sat Flow, veh/h	1781	1585	1781	5233	5233	1585
Grp Volume(v), veh/h	109	109	87	2201	1913	337
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1689	1689	1585
Q Serve(g_s), s	8.3	9.5	1.2	0.0	18.4	8.2
Cycle Q Clear(g_c), s	8.3	9.5	1.2	0.0	18.4	8.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	152	136	223	4307	3969	1242
V/C Ratio(X)	0.72	0.80	0.39	0.51	0.48	0.27
Avail Cap(c_a), veh/h	324	289	282	4307	3969	1242
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.84	0.84	0.28	0.28
Uniform Delay (d), s/veh	62.3	62.9	4.9	0.0	5.3	4.2
Incr Delay (d2), s/veh	6.1	10.5	0.9	0.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.5	0.5	0.1	5.7	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	68.5	73.3	5.8	0.4	5.4	4.3
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	218			2288	2250	
Approach Delay, s/veh	70.9			0.6	5.2	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.5		16.5	9.3	114.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		105.5		25.5	9.5	91.5
Max Q Clear Time (g_c+I1), s		2.0		11.5	3.2	20.4
Green Ext Time (p_c), s		44.1		0.5	0.1	33.3

Intersection Summary		
HCM 6th Ctrl Delay		6.0
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	200	150	755	1290	100
Future Vol, veh/h	70	200	150	755	1290	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	76	217	163	821	1402	109

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2139	701	1511	0	-	0
Stage 1	1402	-	-	-	-	-
Stage 2	737	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*~ 52	381	439	-	-	-
Stage 1	*193	-	-	-	-	-
Stage 2	*720	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*~ 33	381	439	-	-	-
Mov Cap-2 Maneuver	*101	-	-	-	-	-
Stage 1	*121	-	-	-	-	-
Stage 2	*720	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.6	3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	439	-	101	381	-	-
HCM Lane V/C Ratio	0.371	-	0.753	0.571	-	-
HCM Control Delay (s)	18	-	108.3	26.3	-	-
HCM Lane LOS	C	-	F	D	-	-
HCM 95th %tile Q(veh)	1.7	-	4	3.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	200	140	1345	1040	95
Future Vol, veh/h	70	200	140	1345	1040	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	76	217	152	1462	1130	103

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2165	565	1233	0	-	0
Stage 1	1130	-	-	-	-	-
Stage 2	1035	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 40	468	561	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 29	468	561	-	-	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	197	-	-	-	-	-
Stage 2	303	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.4	1.3	0
HCM LOS	D		

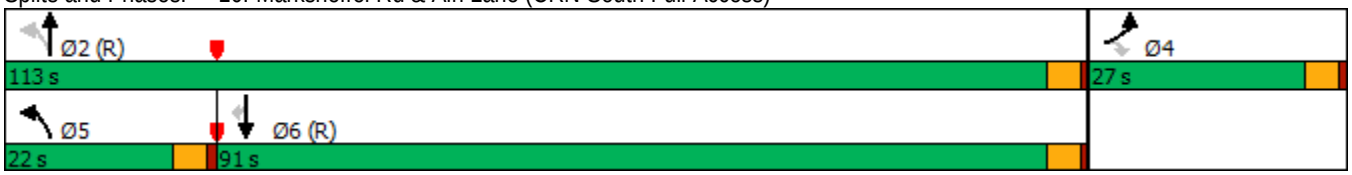
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	561	-	122	468	-	-
HCM Lane V/C Ratio	0.271	-	0.624	0.465	-	-
HCM Control Delay (s)	13.8	-	74.1	19.2	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.1	-	3.2	2.4	-	-

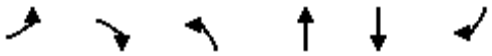
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	200	150	755	1290	100
Future Volume (vph)	70	200	150	755	1290	100
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	27.0	27.0	22.0	113.0	91.0	91.0
Total Split (%)	19.3%	19.3%	15.7%	80.7%	65.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	11.4	11.4	119.6	119.6	107.0	107.0
Actuated g/C Ratio	0.08	0.08	0.85	0.85	0.76	0.76
v/c Ratio	0.53	0.66	0.50	0.28	0.53	0.09
Control Delay	74.3	17.5	16.6	1.9	3.8	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	17.5	16.6	1.9	3.8	0.8
LOS	E	B	B	A	A	A
Approach Delay	32.2			4.3	3.6	
Approach LOS	C			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 6.9	Intersection LOS: A
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	200	150	755	1290	100
Future Volume (veh/h)	70	200	150	755	1290	100
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	1826	1826	1870
Adj Flow Rate, veh/h	76	217	163	821	1402	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	268	238	372	2725	2470	1128
Arrive On Green	0.15	0.15	0.08	1.00	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3561	3561	1585
Grp Volume(v), veh/h	76	217	163	821	1402	109
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1735	1735	1585
Q Serve(g_s), s	5.3	18.9	3.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.3	18.9	3.5	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	268	238	372	2725	2470	1128
V/C Ratio(X)	0.28	0.91	0.44	0.30	0.57	0.10
Avail Cap(c_a), veh/h	286	255	521	2725	2470	1128
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	0.84	0.84
Uniform Delay (d), s/veh	52.8	58.6	4.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	32.7	0.7	0.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	17.8	1.1	0.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.4	91.3	4.7	0.2	0.8	0.1
LnGrp LOS	D	F	A	A	A	A
Approach Vol, veh/h	293			984	1511	
Approach Delay, s/veh	81.4			1.0	0.8	
Approach LOS	F			A	A	

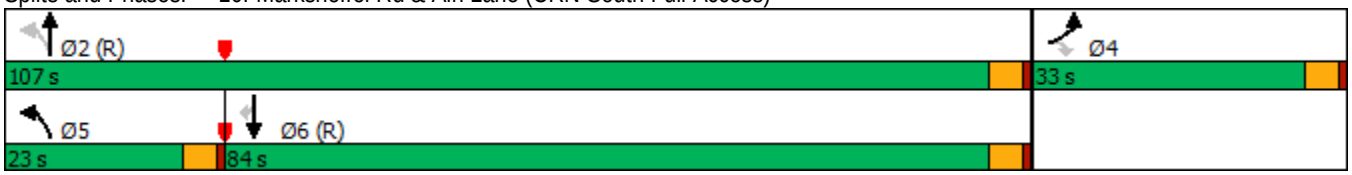
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		114.5		25.5	10.3	104.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		108.5		22.5	17.5	86.5
Max Q Clear Time (g_c+I1), s		2.0		20.9	5.5	2.0
Green Ext Time (p_c), s		7.3		0.2	0.3	18.5

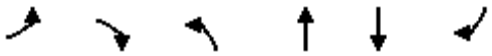
Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	200	140	1345	1040	95
Future Volume (vph)	70	200	140	1345	1040	95
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	23.0	107.0	84.0	84.0
Total Split (%)	23.6%	23.6%	16.4%	76.4%	60.0%	60.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	11.4	11.4	119.6	119.6	107.6	107.6
Actuated g/C Ratio	0.08	0.08	0.85	0.85	0.77	0.77
v/c Ratio	0.53	0.66	0.37	0.49	0.42	0.08
Control Delay	74.3	17.5	5.1	3.1	1.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	17.5	5.1	3.1	1.0	0.1
LOS	E	B	A	A	A	A
Approach Delay	32.2			3.3	1.0	
Approach LOS	C			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 5.1	Intersection LOS: A
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	200	140	1345	1040	95
Future Volume (veh/h)	70	200	140	1345	1040	95
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	1856	1856	1870
Adj Flow Rate, veh/h	76	217	152	1462	1130	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	272	242	442	2760	2510	1129
Arrive On Green	0.15	0.15	0.05	1.00	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3618	3618	1585
Grp Volume(v), veh/h	76	217	152	1462	1130	103
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1763	1763	1585
Q Serve(g_s), s	5.3	18.8	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.3	18.8	3.1	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	272	242	442	2760	2510	1129
V/C Ratio(X)	0.28	0.90	0.34	0.53	0.45	0.09
Avail Cap(c_a), veh/h	363	323	609	2760	2510	1129
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.43	0.43	0.91	0.91
Uniform Delay (d), s/veh	52.5	58.2	4.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	21.4	0.2	0.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	17.0	1.0	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.0	79.6	4.4	0.3	0.5	0.1
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	293			1614	1233	
Approach Delay, s/veh	72.7			0.7	0.5	
Approach LOS	E			A	A	

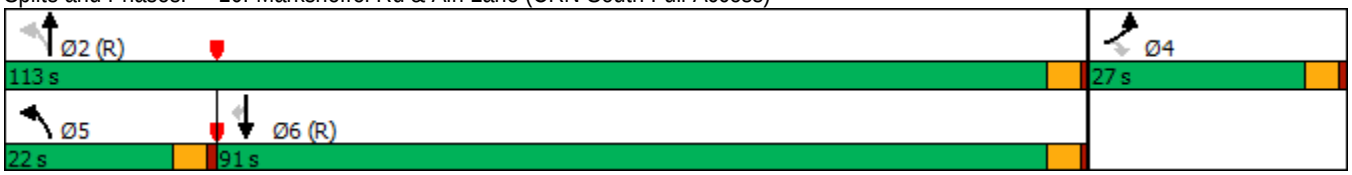
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		114.1		25.9	9.9	104.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		102.5		28.5	18.5	79.5
Max Q Clear Time (g_c+I1), s		2.0		20.8	5.1	2.0
Green Ext Time (p_c), s		19.3		0.6	0.3	12.4

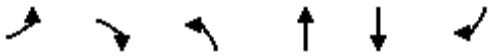
Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	225	165	1145	1665	110
Future Volume (vph)	75	225	165	1145	1665	110
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	27.0	27.0	22.0	113.0	91.0	91.0
Total Split (%)	19.3%	19.3%	15.7%	80.7%	65.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.6	12.6	118.4	118.4	102.7	102.7
Actuated g/C Ratio	0.09	0.09	0.85	0.85	0.73	0.73
v/c Ratio	0.51	0.76	0.66	0.30	0.50	0.10
Control Delay	70.8	28.6	46.2	1.0	4.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.8	28.6	46.2	1.0	4.6	1.3
LOS	E	C	D	A	A	A
Approach Delay	39.2			6.7	4.4	
Approach LOS	D			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 8.4	Intersection LOS: A
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	225	165	1145	1665	110
Future Volume (veh/h)	75	225	165	1145	1665	110
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	1826	1826	1870
Adj Flow Rate, veh/h	82	245	179	1245	1810	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	286	255	294	3863	3474	1105
Arrive On Green	0.16	0.16	0.09	1.00	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	5149	5149	1585
Grp Volume(v), veh/h	82	245	179	1245	1810	120
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1662	1662	1585
Q Serve(g_s), s	5.7	21.5	4.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	21.5	4.1	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	286	255	294	3863	3474	1105
V/C Ratio(X)	0.29	0.96	0.61	0.32	0.52	0.11
Avail Cap(c_a), veh/h	286	255	435	3863	3474	1105
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.88	0.88
Uniform Delay (d), s/veh	51.7	58.3	4.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	45.7	1.7	0.2	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	20.8	1.4	0.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	52.2	104.0	6.1	0.2	0.5	0.2
LnGrp LOS	D	F	A	A	A	A
Approach Vol, veh/h	327			1424	1930	
Approach Delay, s/veh	91.0			0.9	0.5	
Approach LOS	F			A	A	

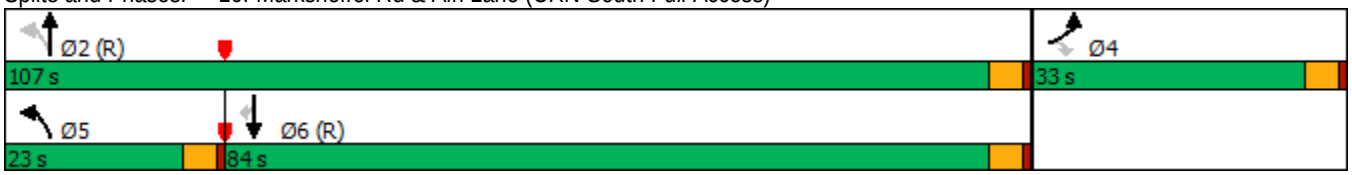
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.0		27.0	10.9	102.1
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		108.5		22.5	17.5	86.5
Max Q Clear Time (g_c+I1), s		2.0		23.5	6.1	2.0
Green Ext Time (p_c), s		13.4		0.0	0.4	28.6

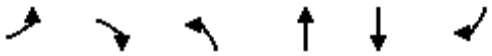
Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	225	235	2030	1705	155
Future Volume (vph)	75	225	235	2030	1705	155
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	23.0	107.0	84.0	84.0
Total Split (%)	23.6%	23.6%	16.4%	76.4%	60.0%	60.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.3	12.3	118.7	118.7	94.8	94.8
Actuated g/C Ratio	0.09	0.09	0.85	0.85	0.68	0.68
v/c Ratio	0.53	0.73	0.73	0.52	0.54	0.15
Control Delay	72.3	24.2	30.7	4.0	1.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	24.2	30.7	4.0	1.6	0.3
LOS	E	C	C	A	A	A
Approach Delay	36.3			6.8	1.5	
Approach LOS	D			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 61.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	225	235	2030	1705	155
Future Volume (veh/h)	75	225	235	2030	1705	155
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	1856	1856	1870
Adj Flow Rate, veh/h	82	245	255	2207	1853	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	302	269	303	3880	3405	1065
Arrive On Green	0.17	0.17	0.08	1.00	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	5233	5233	1585
Grp Volume(v), veh/h	82	245	255	2207	1853	168
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1689	1689	1585
Q Serve(g_s), s	5.6	21.3	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	21.3	6.1	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	302	269	303	3880	3405	1065
V/C Ratio(X)	0.27	0.91	0.84	0.57	0.54	0.16
Avail Cap(c_a), veh/h	363	323	429	3880	3405	1065
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.10	0.10	0.86	0.86
Uniform Delay (d), s/veh	50.6	57.1	11.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	25.8	1.1	0.1	0.5	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	2.6	19.4	2.8	0.0	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.1	82.9	12.3	0.1	0.5	0.3
LnGrp LOS	D	F	B	A	A	A
Approach Vol, veh/h	327			2462	2021	
Approach Delay, s/veh	74.9			1.3	0.5	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		111.7		28.3	13.1	98.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		102.5		28.5	18.5	79.5
Max Q Clear Time (g_c+I1), s		2.0		23.3	8.1	2.0
Green Ext Time (p_c), s		44.0		0.5	0.5	29.9

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	200	50	2	70	25	22
Future Vol, veh/h	200	50	2	70	25	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	185	-	-	-	-
Veh in Median Storage, #	0	-	1	-	-	1
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	54	2	76	27	24

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	118	40	0	0	78	0
Stage 1	40	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	878	1031	-	-	1520	-
Stage 1	982	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	862	1031	-	-	1520	-
Mov Cap-2 Maneuver	862	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	3.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	862	1031	1520	-
HCM Lane V/C Ratio	-	-	0.252	0.053	0.018	-
HCM Control Delay (s)	-	-	10.6	8.7	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1	-

Intersection	
Int Delay, s/veh	7.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	185	50	2	70	25	22
Future Vol, veh/h	185	50	2	70	25	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	235	-	-	-	-
Veh in Median Storage, #	0	-	1	-	-	1
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	54	2	76	27	24

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	118	40	0	0	78	0
Stage 1	40	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	878	1031	-	-	1520	-
Stage 1	982	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	862	1031	-	-	1520	-
Mov Cap-2 Maneuver	862	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	3.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	862	1031	1520	-
HCM Lane V/C Ratio	-	-	0.233	0.053	0.018	-
HCM Control Delay (s)	-	-	10.4	8.7	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.2	0.1	-

Intersection	
Int Delay, s/veh	7.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	220	55	2	75	25	25
Future Vol, veh/h	220	55	2	75	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	235	-	-	-	-
Veh in Median Storage, #	0	-	1	-	-	1
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	60	2	82	27	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	124	43	0	0	84	0
Stage 1	43	-	-	-	-	-
Stage 2	81	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	871	1027	-	-	1513	-
Stage 1	979	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	855	1027	-	-	1513	-
Mov Cap-2 Maneuver	855	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	3.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	855	1027	1513	-
HCM Lane V/C Ratio	-	-	0.28	0.058	0.018	-
HCM Control Delay (s)	-	-	10.8	8.7	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.2	0.1	-

Intersection	
Int Delay, s/veh	8.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	310	80	2	75	25	25
Future Vol, veh/h	310	80	2	75	25	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	235	-	-	-	-
Veh in Median Storage, #	0	-	1	-	-	1
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	337	87	2	82	27	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	124	43	0	0	84	0
Stage 1	43	-	-	-	-	-
Stage 2	81	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	871	1027	-	-	1513	-
Stage 1	979	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	855	1027	-	-	1513	-
Mov Cap-2 Maneuver	855	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	3.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	855	1027	1513	-
HCM Lane V/C Ratio	-	-	0.394	0.085	0.018	-
HCM Control Delay (s)	-	-	11.9	8.8	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0.3	0.1	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	45	50	200	310	2
Future Vol, veh/h	2	45	50	200	310	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	49	54	217	337	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	271	0	-	0	107	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1292	-	-	-	891	1013
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1292	-	-	-	889	1013
Mov Cap-2 Maneuver	-	-	-	-	848	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1292	-	-	-	849
HCM Lane V/C Ratio	0.002	-	-	-	0.399
HCM Control Delay (s)	7.8	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.9

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	45	50	185	310	2
Future Vol, veh/h	2	45	50	185	310	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	135	-	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	49	54	201	337	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	255	0	-	0	107	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1310	-	-	-	891	1013
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1310	-	-	-	889	1013
Mov Cap-2 Maneuver	-	-	-	-	848	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1310	-	-	-	849
HCM Lane V/C Ratio	0.002	-	-	-	0.399
HCM Control Delay (s)	7.8	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.9

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	50	55	220	345	2
Future Vol, veh/h	2	50	55	220	345	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	135	-	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	54	60	239	375	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	299	0	-	0	118	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1262	-	-	-	878	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1262	-	-	-	876	1005
Mov Cap-2 Maneuver	-	-	-	-	839	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	965	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1262	-	-	-	840
HCM Lane V/C Ratio	0.002	-	-	-	0.449
HCM Control Delay (s)	7.9	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	2.3

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	50	80	310	350	2
Future Vol, veh/h	2	50	80	310	350	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	135	-	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	54	87	337	380	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	424	0	-	0	145	87
Stage 1	-	-	-	-	87	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1135	-	-	-	847	971
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1135	-	-	-	845	971
Mov Cap-2 Maneuver	-	-	-	-	818	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	965	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1135	-	-	-	819
HCM Lane V/C Ratio	0.002	-	-	-	0.467
HCM Control Delay (s)	8.2	0	-	-	13.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	2.5

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	90	50	860	1300	200
Future Vol, veh/h	0	90	50	860	1300	200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	0	98	54	935	1413	217

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	707	1630	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	378	394	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	378	394	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.8	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	394	-	378	-	-
HCM Lane V/C Ratio	0.138	-	0.259	-	-
HCM Control Delay (s)	15.6	-	17.8	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0.5	-	1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	90	50	1450	1045	185
Future Vol, veh/h	0	90	50	1450	1045	185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	0	98	54	1576	1136	201

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	568	1337	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	466	512	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	466	512	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	512	-	466	-	-
HCM Lane V/C Ratio	0.106	-	0.21	-	-
HCM Control Delay (s)	12.9	-	14.8	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	100	55	1260	1675	220
Future Vol, veh/h	0	100	55	1260	1675	220
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	5	5	2
Mvmt Flow	0	109	60	1370	1821	239

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	911	2060	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	5.34	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	0	*514	556	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*514	556	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	556	-	514	-	-
HCM Lane V/C Ratio	0.108	-	0.211	-	-
HCM Control Delay (s)	12.3	-	13.9	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	100	80	2125	1760	310
Future Vol, veh/h	0	100	80	2125	1760	310
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	300	-	-	250
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	0	109	87	2310	1913	337

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	957	2250	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	5.34	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	0	*492	449	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*492	449	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.5	0
HCM LOS	B		

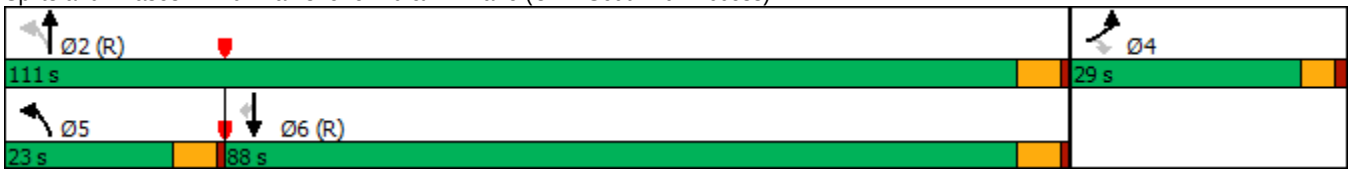
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	449	-	492	-	-
HCM Lane V/C Ratio	0.194	-	0.221	-	-
HCM Control Delay (s)	14.9	-	14.4	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.7	-	0.8	-	-

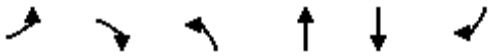
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	155	200	150	755	1290	100
Future Volume (vph)	155	200	150	755	1290	100
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.5	23.5	23.5	23.5
Total Split (s)	29.0	29.0	23.0	111.0	88.0	88.0
Total Split (%)	20.7%	20.7%	16.4%	79.3%	62.9%	62.9%
Yellow Time (s)	3.5	3.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	18.3	18.3	111.2	111.2	96.5	96.5
Actuated g/C Ratio	0.13	0.13	0.79	0.79	0.69	0.69
v/c Ratio	0.73	0.55	0.55	0.30	0.59	0.10
Control Delay	75.9	11.8	22.5	3.3	17.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.9	11.8	22.5	3.3	17.0	2.7
LOS	E	B	C	A	B	A
Approach Delay	39.8			6.5	16.0	
Approach LOS	D			A	B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 15.9	Intersection LOS: B
Intersection Capacity Utilization 65.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	155	200	150	755	1290	100
Future Volume (veh/h)	155	200	150	755	1290	100
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	1826	1826	1870
Adj Flow Rate, veh/h	168	217	163	821	1402	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	270	241	295	2682	2395	1094
Arrive On Green	0.15	0.15	0.09	1.00	0.69	0.69
Sat Flow, veh/h	1781	1585	1781	3561	3561	1585
Grp Volume(v), veh/h	168	217	163	821	1402	109
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1735	1735	1585
Q Serve(g_s), s	12.4	18.8	3.8	0.0	29.4	3.2
Cycle Q Clear(g_c), s	12.4	18.8	3.8	0.0	29.4	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	270	241	295	2682	2395	1094
V/C Ratio(X)	0.62	0.90	0.55	0.31	0.59	0.10
Avail Cap(c_a), veh/h	305	272	440	2682	2395	1094
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	55.6	58.3	10.8	0.0	11.3	7.2
Incr Delay (d2), s/veh	3.2	28.5	1.4	0.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	17.5	1.8	0.1	11.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.8	86.9	12.2	0.3	12.3	7.4
LnGrp LOS	E	F	B	A	B	A
Approach Vol, veh/h	385			984	1511	
Approach Delay, s/veh	74.6			2.2	12.0	
Approach LOS	E			A	B	

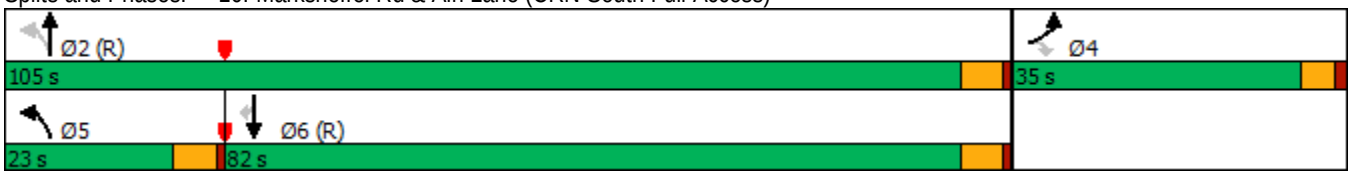
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.7		26.3	11.6	102.2
Change Period (Y+Rc), s		5.5		5.0	5.5	5.5
Max Green Setting (Gmax), s		105.5		24.0	17.5	82.5
Max Q Clear Time (g_c+I1), s		2.0		20.8	5.8	31.4
Green Ext Time (p_c), s		7.3		0.4	0.3	17.1

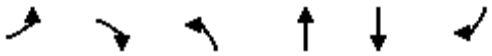
Intersection Summary		
HCM 6th Ctrl Delay		17.0
HCM 6th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	155	200	140	1345	1040	95
Future Volume (vph)	155	200	140	1345	1040	95
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.5	23.5	23.5	23.5
Total Split (s)	35.0	35.0	23.0	105.0	82.0	82.0
Total Split (%)	25.0%	25.0%	16.4%	75.0%	58.6%	58.6%
Yellow Time (s)	3.5	3.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	18.6	18.6	110.9	110.9	97.1	97.1
Actuated g/C Ratio	0.13	0.13	0.79	0.79	0.69	0.69
v/c Ratio	0.72	0.55	0.40	0.53	0.47	0.09
Control Delay	74.6	11.6	8.7	5.8	1.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.6	11.6	8.7	5.8	1.9	0.1
LOS	E	B	A	A	A	A
Approach Delay	39.1			6.1	1.7	
Approach LOS	D			A	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 58.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	155	200	140	1345	1040	95
Future Volume (veh/h)	155	200	140	1345	1040	95
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	1856	1856	1870
Adj Flow Rate, veh/h	168	217	152	1462	1130	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	275	245	369	2716	2436	1095
Arrive On Green	0.15	0.15	0.04	0.77	0.69	0.69
Sat Flow, veh/h	1781	1585	1781	3618	3618	1585
Grp Volume(v), veh/h	168	217	152	1462	1130	103
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1763	1763	1585
Q Serve(g_s), s	12.3	18.8	3.3	22.8	20.4	3.0
Cycle Q Clear(g_c), s	12.3	18.8	3.3	22.8	20.4	3.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	275	245	369	2716	2436	1095
V/C Ratio(X)	0.61	0.89	0.41	0.54	0.46	0.09
Avail Cap(c_a), veh/h	382	340	520	2716	2436	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.43	0.43	1.00	1.00
Uniform Delay (d), s/veh	55.2	58.0	7.7	6.3	9.8	7.1
Incr Delay (d2), s/veh	2.2	18.2	0.3	0.3	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	5.7	16.8	1.2	7.7	7.8	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.4	76.1	8.0	6.6	10.5	7.3
LnGrp LOS	E	E	A	A	B	A
Approach Vol, veh/h	385			1614	1233	
Approach Delay, s/veh	68.0			6.8	10.2	
Approach LOS	E			A	B	

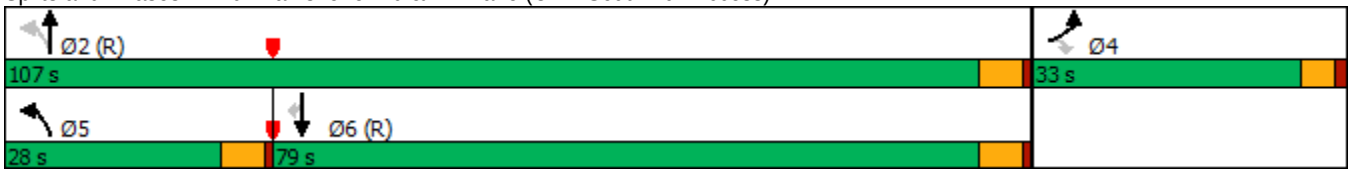
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.3		26.7	11.1	102.2
Change Period (Y+Rc), s		5.5		5.0	5.5	5.5
Max Green Setting (Gmax), s		99.5		30.0	17.5	76.5
Max Q Clear Time (g_c+I1), s		24.8		20.8	5.3	22.4
Green Ext Time (p_c), s		18.8		0.9	0.3	12.0

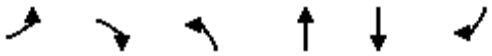
Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	225	165	1145	1665	110
Future Volume (vph)	175	225	165	1145	1665	110
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.5	23.5	23.5	23.5
Total Split (s)	33.0	33.0	28.0	107.0	79.0	79.0
Total Split (%)	23.6%	23.6%	20.0%	76.4%	56.4%	56.4%
Yellow Time (s)	3.5	3.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	20.2	20.2	109.3	109.3	90.3	90.3
Actuated g/C Ratio	0.14	0.14	0.78	0.78	0.64	0.64
v/c Ratio	0.75	0.56	0.66	0.32	0.57	0.11
Control Delay	74.4	10.9	51.6	2.3	14.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.4	10.9	51.6	2.3	14.8	3.2
LOS	E	B	D	A	B	A
Approach Delay	38.6			8.5	14.1	
Approach LOS	D			A	B	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	225	165	1145	1665	110
Future Volume (veh/h)	175	225	165	1145	1665	110
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	1826	1826	1870
Adj Flow Rate, veh/h	190	245	179	1245	1810	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	5	5	2
Cap, veh/h	304	271	249	3760	3317	1055
Arrive On Green	0.17	0.17	0.10	1.00	0.67	0.67
Sat Flow, veh/h	1781	1585	1781	5149	5149	1585
Grp Volume(v), veh/h	190	245	179	1245	1810	120
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1662	1662	1585
Q Serve(g_s), s	13.9	21.2	4.5	0.0	26.7	3.8
Cycle Q Clear(g_c), s	13.9	21.2	4.5	0.0	26.7	3.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	304	271	249	3760	3317	1055
V/C Ratio(X)	0.62	0.91	0.72	0.33	0.55	0.11
Avail Cap(c_a), veh/h	356	317	447	3760	3317	1055
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	1.00	1.00
Uniform Delay (d), s/veh	53.9	56.9	15.8	0.0	12.3	8.5
Incr Delay (d2), s/veh	2.6	25.6	3.2	0.2	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	6.5	19.3	3.5	0.1	9.8	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.5	82.5	19.0	0.2	12.9	8.7
LnGrp LOS	E	F	B	A	B	A
Approach Vol, veh/h	435			1424	1930	
Approach Delay, s/veh	71.2			2.6	12.7	
Approach LOS	E			A	B	

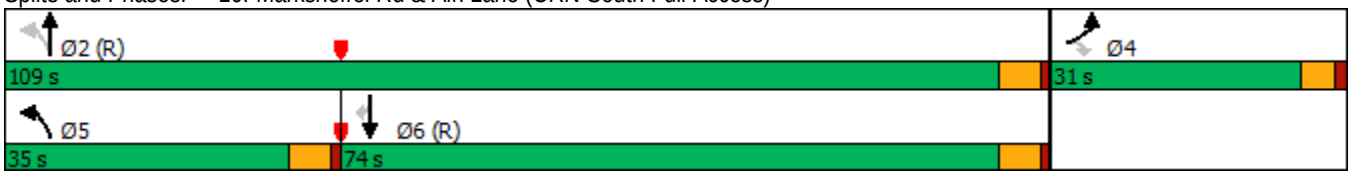
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		111.1		28.9	12.4	98.7
Change Period (Y+Rc), s		5.5		5.0	5.5	5.5
Max Green Setting (Gmax), s		101.5		28.0	22.5	73.5
Max Q Clear Time (g_c+I1), s		2.0		23.2	6.5	28.7
Green Ext Time (p_c), s		13.4		0.7	0.4	22.9

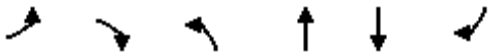
Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	175	225	235	2030	1705	155
Future Volume (vph)	175	225	235	2030	1705	155
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	10.5	23.5	23.5	23.5
Total Split (s)	31.0	31.0	35.0	109.0	74.0	74.0
Total Split (%)	22.1%	22.1%	25.0%	77.9%	52.9%	52.9%
Yellow Time (s)	3.5	3.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	20.0	20.0	109.5	109.5	84.0	84.0
Actuated g/C Ratio	0.14	0.14	0.78	0.78	0.60	0.60
v/c Ratio	0.75	0.56	0.76	0.56	0.61	0.17
Control Delay	75.7	11.1	34.9	10.8	8.2	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.7	11.1	34.9	10.8	8.2	1.1
LOS	E	B	C	B	A	A
Approach Delay	39.3			13.3	7.6	
Approach LOS	D			B	A	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 69.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Marksheffel Rd & Airl Lane (CRN South Full Access)





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	225	235	2030	1705	155
Future Volume (veh/h)	175	225	235	2030	1705	155
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	1856	1856	1870
Adj Flow Rate, veh/h	190	245	255	2207	1853	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	2
Cap, veh/h	302	268	284	3828	3223	1008
Arrive On Green	0.17	0.17	0.08	0.76	0.64	0.64
Sat Flow, veh/h	1781	1585	1781	5233	5233	1585
Grp Volume(v), veh/h	190	245	255	2207	1853	168
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1689	1689	1585
Q Serve(g_s), s	13.9	21.3	8.5	26.4	29.4	6.0
Cycle Q Clear(g_c), s	13.9	21.3	8.5	26.4	29.4	6.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	302	268	284	3828	3223	1008
V/C Ratio(X)	0.63	0.91	0.90	0.58	0.58	0.17
Avail Cap(c_a), veh/h	331	294	517	3828	3223	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.10	0.10	1.00	1.00
Uniform Delay (d), s/veh	54.1	57.1	29.4	7.4	14.6	10.4
Incr Delay (d2), s/veh	3.3	29.6	1.2	0.1	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	19.6	9.0	8.7	11.2	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.4	86.7	30.5	7.5	15.4	10.7
LnGrp LOS	E	F	C	A	B	B
Approach Vol, veh/h	435			2462	2021	
Approach Delay, s/veh	73.9			9.9	15.0	
Approach LOS	E			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		111.3		28.7	16.7	94.6
Change Period (Y+Rc), s		5.5		5.0	5.5	5.5
Max Green Setting (Gmax), s		103.5		26.0	29.5	68.5
Max Q Clear Time (g_c+I1), s		28.4		23.3	10.5	31.4
Green Ext Time (p_c), s		39.0		0.4	0.7	21.7

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

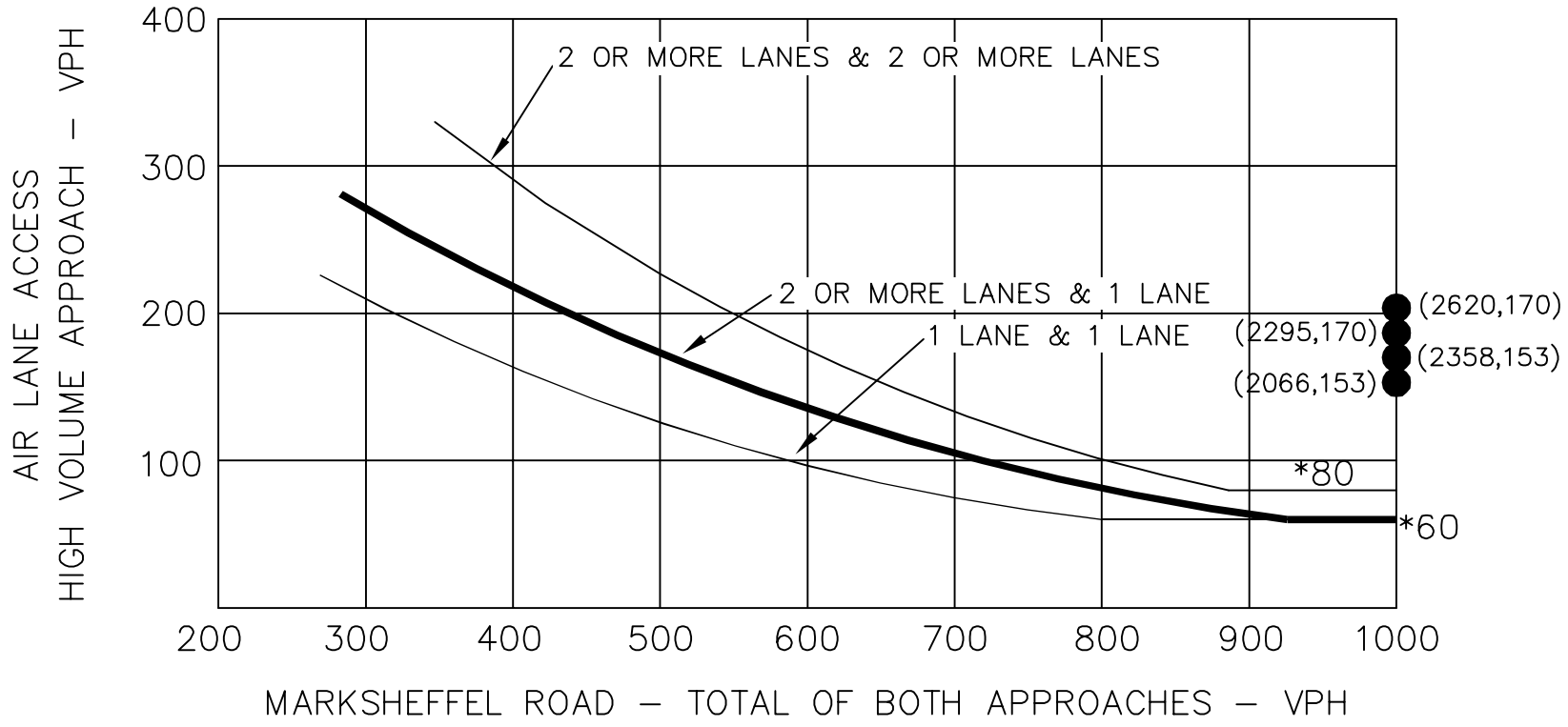
APPENDIX E

Signal Warrant Analysis

Signal Timings

WARRANT 2 - FOUR HOUR VEHICULAR VOLUME (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h (40 mph) ON MAJOR STREET)



MARKSHEFFEL ROAD
AND AIR LANE ACCESS
SIGNAL WARRANT ANALYSIS
FOUR HOUR VOLUME WARRANT

* NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● 2026 TOTAL TRAFFIC DATA POINT WITH PROJECT

Source: Manual of Uniform Traffic Control Devices 2009

Kimley»Horn

CDOT

MaxTime Timing Sheet

2.0.16 Update

Administration

Cross Black_White.jpg

Unit Information

Controller ID	0
Main St.	24G
Side St.	94A

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	Mode
1				Disable	Static
2				Disable	Static

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	1
All Red Exit	0
MCE Seq.	1
Master By TOD	Disable

Auto Ped Clr	Enable
Grn Flash Freq.	60
Start Yellow	0.0
Flash CVM	Disable

Red Revert	4.0
Yel Flash Freq.	60
Start Red	0.0
All Red Flash	Enable
Auto Ped Clear	Enable

Backup Time	600
MCE Enable	Enable
Start Clear Hold	6
3 Phs Dia Seq	
4 Phs Dia Seq	

Ext Mode	Disable
Free Seq.	1

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	6	22	5	5	6	22	4	5	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	2.0	2.0	2.0	3.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	7	65	15	5	8	65	5	15	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conditional Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.5	6.0	3.5	4.0	3.5	6.0	3.5	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.0	1.0	3.0	2.0	3.0	1.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ped Service Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	6.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre Clearance 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Jump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Warning Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry				X				X												
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher		X				X														
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				
Coord Ped Yield																				
Ped Recycle																				
Coutdown																				

No Serve Phases

Sequence 1	
Ph.	No Serve Phases
1	
2	

Sequence 2	
Ph.	No Serve Phases
1	
2	

Sequence 3	
Ph.	No Serve Phases
1	
2	

Sequence 4	
Ph.	No Serve Phases
1	
2	

3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	

Sequence 1		Sequence 2		Sequence 3		Sequence 4	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

Phase Configuration

Ph.	Startup	Ring	Concurrent	Startup Min	Description
1	Phase Not On	1	5,6	0	
2	Green No Walk	1	5,6	0	
3	Phase Not On	1	7,8	0	
4	Phase Not On	1	7,8	0	
5	Phase Not On	2	1,2	0	
6	Green No Walk	2	1,2	0	
7	Phase Not On	2	3,4	0	
8	Phase Not On	2	3,4	0	
9	None	0		0	
10	None	0		0	
11	None	0		0	
12	None	0		0	
13	None	0		0	
14	None	0		0	
15	None	0		0	
16	None	0		0	
17	None	0		0	
18	None	0		0	
19	None	0		0	
20	None	0		0	

Sequence Configuration

Sequence 1		**Sequence 2**		**Sequence 3**		**Sequence 4**	
Ring	Phases	Ring	Phases	Ring	Phases	Ring	Phases
1	1,2,a,3,4,b	1	1,2,a,4,3,b	1	1,2,a,3,4,b	1	2,1,a,4,3,b
2	5,6,a,7,8,b	2	5,6,a,8,7,b	2	5,6,a,7,8,b	2	5,6,a,7,8,b
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	

15		15		15		15	
16		16		16		16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 5

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 10

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 11

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 12

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

Sequence 17

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 18

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 19

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 20

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 17

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 18

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 19

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 20

9	
10	
11	
12	
13	
14	
15	
16	

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Min																				
Max		X				X														
Ped																				
Act Walk Rest																				

Global Veh Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0
Global Failed Recall	None
Detector Reset Enable	Enabled

Global Ped Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Global Pri/Pre Det Diag

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Vehicle Detection Parameters

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
1	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
2	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
3	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
4	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
5	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
6	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
7	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
8	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
9	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
10	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
11	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
12	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
13	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
14	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
15	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

16	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
17	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
18	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
19	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
20	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
21	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
22	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
23	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
24	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
25	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
26	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
27	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
28	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
29	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
30	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
31	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
32	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
33	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
34	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
35	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
36	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
37	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
38	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
39	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
40	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
41	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
42	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
43	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
44	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
45	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
46	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
47	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
48	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
49	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
50	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
51	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
52	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
53	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
54	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
55	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
56	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
57	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
58	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
59	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
60	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
61	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
62	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
63	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
64	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
65	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
66	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
67	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
68	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
69	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

~~70~~	~~0~~	~~0~~	~~0~~		~~0~~	~~0.0~~	~~0.0~~	~~0~~	~~0.0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~None~~	~~0~~	
71	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X												
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend																				
Added Initial																				
Queue																				
Call																				
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector												
Occupancy												
Yellow Lock Call												
Red Lock call												
Extend												
Added Initial												
Queue												

Data Collection Period	0
Number of Periods	1

Call												
Terminate												
Min Green 2												
Protected Perm												
Disable Dly Lead												
Disable TS2 Diag												

Speed Detectors

Det	Enable	Type	Units	Min Log	Max Log	Car Length	Det Length	Trail Det	Trap Length
1		Single	Inches	5	80	0	0	0	0
2		Single	Inches	5	80	0	0	0	0
3		Single	Inches	5	80	0	0	0	0
4		Single	Inches	5	80	0	0	0	0
5		Single	Inches	5	80	0	0	0	0
6		Single	Inches	5	80	0	0	0	0
7		Single	Inches	5	80	0	0	0	0
8		Single	Inches	5	80	0	0	0	0

Pedestrian Detectors

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
1	0	0		0	0	0	0	0
2	2	0		0	0	0	0	0
3	0	0		0	0	0	0	0
4	4	0		0	0	0	0	0
5	0	0		0	0	0	0	0
6	6	0		0	0	0	0	0
7	0	0		0	0	0	0	0
8	8	0		0	0	0	0	0
9	0	0		0	0	0	0	0
10	0	0		0	0	0	0	0
11	0	0		0	0	0	0	0
12	0	0		0	0	0	0	0
13	0	0		0	0	0	0	0
14	0	0		0	0	0	0	0
15	0	0		0	0	0	0	0
16	0	0		0	0	0	0	0
17	0	0		0	0	0	0	0
18	0	0		0	0	0	0	0
19	0	0		0	0	0	0	0
20	0	0		0	0	0	0	0

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
21	0	0		0	0	0	0	0
22	0	0		0	0	0	0	0
23	0	0		0	0	0	0	0
24	0	0		0	0	0	0	0
25	0	0		0	0	0	0	0
26	0	0		0	0	0	0	0
27	0	0		0	0	0	0	0
28	0	0		0	0	0	0	0
29	0	0		0	0	0	0	0
30	0	0		0	0	0	0	0
31	0	0		0	0	0	0	0
32	0	0		0	0	0	0	0
33	0	0		0	0	0	0	0
34	0	0		0	0	0	0	0
35	0	0		0	0	0	0	0
36	0	0		0	0	0	0	0
37	0	0		0	0	0	0	0
38	0	0		0	0	0	0	0
39	0	0		0	0	0	0	0
40	0	0		0	0	0	0	0

Pri/Pre Detectors

Det	Description	Low Call	High Call	Low Num	high Num	Lead/Trail	Arrival Time	Pri Dlay	Dlay	Ext	Min On	Pri Olvp	No Act	Max Pres	Erratic Count
1		None	None	0	0	None	0	0	0	0	0		0	0	0
2		None	None	0	0	None	0	0	0	0	0		0	0	0
3		None	None	0	0	None	0	0	0	0	0		0	0	0
4		None	None	0	0	None	0	0	0	0	0		0	0	0
5		None	None	0	0	None	0	0	0	0	0		0	0	0
6		None	None	0	0	None	0	0	0	0	0		0	0	0
7		None	None	0	0	None	0	0	0	0	0		0	0	0
8		None	None	0	0	None	0	0	0	0	0		0	0	0

Overlaps

OLP	Enabled	Type	Included Phs	Modifier Phs	Modifier Ovlps	Neg Phases	Inhibit Neg Phs	Neg Ovlps
1	Enabled	FYA - 4 Sec	2	1				
2	Disabled	Off						

3	Disabled	FYA - 4 Sec	4	3				
4	Disabled	Off						
5	Enabled	FYA - 4 Sec	6	5				
6	Disabled	Off						
7	Disabled	FYA - 4 Sec	8	7				
8	Disabled	Off						
9	Disabled	Off						
10	Disabled	Off						
11	Disabled	Off						
12	Disabled	Off						
13	Disabled	Off						
14	Disabled	Off						
15	Disabled	Off						
16	Disabled	Off						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
1						
2						
3						
4						
5						
6						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

OLP	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Min Green	Mx Grn Ext	Red Revert	Flash Inactive	Flash Alt	Walk Rest
1	0	0.0	0.0	0	0	0	0	2.0	On	0	0	0.0	Off	Off	Off
2	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
3	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
4	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
5	0	0.0	0.0	0	0	0	0	2.0	On	0	0	0.0	Off	Off	Off
6	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
7	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
8	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
9	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
10	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
11	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
12	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
13	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
14	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
15	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
16	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off

Overlap Options

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup Call																
Recall																

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call for Service																
Trail Grn Bridge																

No Veh Reserv														
No Hold Trail Exit														
Ped Recycle														
No Yellow Protect														
No Bridging														
LRT Prepare Go														

FYA Prot. Red Cl														
Phs Intvl Override														
Queue Jump														
No FYA Ped Wlk														
Term After Call														

Custom Overlap Rules

Rule	Custom Ovlp	Incl. State	Mod. State	Neg. State	Output	Flash
1	Disable	Any		Any	Not Set	Not Set
2	Disable	Any		Any	Not Set	Not Set
3	Disable	Any		Any	Not Set	Not Set
4	Disable	Any		Any	Not Set	Not Set
5	Disable	Any		Any	Not Set	Not Set
6	Disable	Any		Any	Not Set	Not Set
7	Disable	Any		Any	Not Set	Not Set
8	Disable	Any		Any	Not Set	Not Set
9	Disable	Any		Any	Not Set	Not Set
10	Disable	Any		Any	Not Set	Not Set

Coordination Parameters

Operational Mode	Automatic
Coordination Mode	Pattern
Correction Mode	Shortway (Auto)

Maximum Mode	Per Pattern
Force Mode	Per Pattern
Transition Cover Ped	Pattern

Max Cyc Limit %	15
Min Cyc Limit %	15
Max Dwell	0

Patterns

		Offset					Ref	Coord	Force	Max	Trans	Min	Phs	Det	Ped	Ovlp	Pri	
Patt.	Cycle	1	2	3	Split	Seq	Col	Mode	Mode	Mode	Ped	Perm	Pln	Pln	Pln	Pln	Pln	Description
1	140	52	0	0	1	1	Yel	Auto	Float	Inh	Phase	Phs Only	1	1	1	1	1	AM
2	90	0	0	0	2	2	Yel	Auto	Float	Inh	Phase	Phs Only	1	1	1	1	1	MID
3	140	52	0	0	3	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	PM
4	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
5	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
6	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
7	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
8	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
9	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
10	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
11	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
12	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
13	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
14	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
15	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
16	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
17	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
18	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
19	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
20	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	

Split Parameters

Split 1				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	13	0	0				Fix	None	0	0	Float
2	86	0	0	X	X		Fix	Max Rcl	0	0	Float
3	30	0	0				Fix	None	0	0	Float
4	11	0	0				Fix	None	0	0	Float
5	18	0	0				Fix	None	0	0	Float
6	81	0	0	X	X		Fix	Max Rcl	0	0	Float

7	16	0	0				Fix	None	0	0	Float
8	25	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 2				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	13	0	0				Fix	None	0	0	Float
2	45	0	0	X	X		Fix	Max Rcl	0	0	Float
3	20	0	0				Fix	None	0	0	Float
4	12	0	0				Fix	None	0	0	Float
5	13	0	0				Fix	None	0	0	Float
6	45	0	0	X	X		Fix	Max Rcl	0	0	Float
7	12	0	0				Fix	None	0	0	Float
8	20	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 3				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	13	0	0				Fix	None	0	0	Float
2	84	0	0	X	X		Fix	Max Rcl	0	0	Float
3	30	0	0				Fix	None	0	0	Float
4	13	0	0				Fix	None	0	0	Float
5	20	0	0				Fix	None	0	0	Float
6	77	0	0	X	X		Fix	Max Rcl	0	0	Float
7	20	0	0				Fix	None	0	0	Float
8	23	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 4				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float

8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 5				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0		

CDOT

MaxTime Timing Sheet

2.0.16 Update

Administration

Cross Black_White.jpg

Unit Information

Controller ID	0
Main St.	24G
Side St.	Marksheffel

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	Mode
1				Disable	Static
2				Disable	Static

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	0
All Red Exit	0
MCE Seq.	1
Master By TOD	Disable

Auto Ped Clr	Enable
Grn Flash Freq.	60
Start Yellow	0.0
Flash CVM	Disable

Red Revert	4.0
Yel Flash Freq.	60
Start Red	0.0
All Red Flash	Enable
Auto Ped Clear	Enable

Backup Time	600
MCE Enable	Enable
Start Clear Hold	6
3 Phs Dia Seq	
4 Phs Dia Seq	

Ext Mode	Disable
Free Seq.	1

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	6	20	4	6	6	20	5	6	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	2.0	2.0	2.0	2.0	5.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	16	37	6	32	15	40	6	31	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conditional Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.5	6.0	3.5	4.5	3.5	6.0	3.5	4.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.0	1.0	3.0	1.5	3.0	1.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ped Service Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	6.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre Clearance 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Jump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Warning Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry				X				X												
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher		X				X														
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				
Coord Ped Yield																				
Ped Recycle																				
Coutdown																				

No Serve Phases

Sequence 1	
Ph.	No Serve Phases
1	
2	

Sequence 2	
Ph.	No Serve Phases
1	
2	

Sequence 3	
Ph.	No Serve Phases
1	
2	

Sequence 4	
Ph.	No Serve Phases
1	
2	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

Sequence 1	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4	
9	
10	
11	
12	
13	
14	
15	
16	

Phase Configuration

Ph.	Startup	Ring	Concurrent	Startup Min	Description
1	Phase Not On	1	5,6	0	
2	Green No Walk	1	5,6	0	
3	Phase Not On	1	7,8	0	
4	Phase Not On	1	7,8	0	
5	Phase Not On	2	1,2	0	
6	Green No Walk	2	1,2	0	
7	Phase Not On	2	3,4	0	
8	Phase Not On	2	3,4	0	
9	None	0		0	
10	None	0		0	
11	None	0		0	
12	None	0		0	
13	None	0		0	
14	None	0		0	
15	None	0		0	
16	None	0		0	
17	None	0		0	
18	None	0		0	
19	None	0		0	
20	None	0		0	

Sequence Configuration

Sequence 1

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 2

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 3

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15		15		15		15	
16		16		16		16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 5

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 10

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 11

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 12

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

13	
14	
15	
16	

13	
14	
15	
16	

13	
14	
15	
16	

13	
14	
15	
16	

Sequence 17

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 18

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 19

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 20

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 17

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 18

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 19

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 20

9	
10	
11	
12	
13	
14	
15	
16	

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Min																				
Max		X				X														
Ped																				
Act Walk Rest																				

Global Veh Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0
Global Failed Recall	None
Detector Reset Enable	Enabled

Global Ped Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Global Pri/Pre Det Diag

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Vehicle Detection Parameters

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
1	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
2	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
3	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
4	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
5	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
6	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
7	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
8	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
9	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
10	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
11	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
12	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
13	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
14	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
15	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

16	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
17	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
18	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
19	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
20	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
21	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
22	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
23	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
24	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
25	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
26	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
27	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
28	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
29	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
30	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
31	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
32	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
33	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
34	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
35	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
36	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
37	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
38	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
39	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
40	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
41	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
42	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
43	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
44	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
45	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
46	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
47	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
48	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
49	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
50	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
51	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
52	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
53	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
54	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
55	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
56	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
57	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
58	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
59	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
60	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
61	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
62	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
63	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
64	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
65	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
66	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
67	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
68	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
69	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

~~70~~	~~0~~	~~0~~	~~0~~		~~0~~	~~0.0~~	~~0.0~~	~~0~~	~~0.0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~None~~	~~0~~	
71	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X												
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend																				
Added Initial																				
Queue																				
Call																				
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector												
Occupancy												
Yellow Lock Call												
Red Lock call												
Extend												
Added Initial												
Queue												

Data Collection Period	0
Number of Periods	1

Call												
Terminate												
Min Green 2												
Protected Perm												
Disable Dly Lead												
Disable TS2 Diag												

Speed Detectors

Det	Enable	Type	Units	Min Log	Max Log	Car Length	Det Length	Trail Det	Trap Length
1		Single	Inches	5	80	0	0	0	0
2		Single	Inches	5	80	0	0	0	0
3		Single	Inches	5	80	0	0	0	0
4		Single	Inches	5	80	0	0	0	0
5		Single	Inches	5	80	0	0	0	0
6		Single	Inches	5	80	0	0	0	0
7		Single	Inches	5	80	0	0	0	0
8		Single	Inches	5	80	0	0	0	0

Pedestrian Detectors

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
1	0	0		0	0	0	0	0
2	2	0		0	0	0	0	0
3	0	0		0	0	0	0	0
4	4	0		0	0	0	0	0
5	0	0		0	0	0	0	0
6	6	0		0	0	0	0	0
7	0	0		0	0	0	0	0
8	8	0		0	0	0	0	0
9	0	0		0	0	0	0	0
10	0	0		0	0	0	0	0
11	0	0		0	0	0	0	0
12	0	0		0	0	0	0	0
13	0	0		0	0	0	0	0
14	0	0		0	0	0	0	0
15	0	0		0	0	0	0	0
16	0	0		0	0	0	0	0
17	0	0		0	0	0	0	0
18	0	0		0	0	0	0	0
19	0	0		0	0	0	0	0
20	0	0		0	0	0	0	0

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
21	0	0		0	0	0	0	0
22	0	0		0	0	0	0	0
23	0	0		0	0	0	0	0
24	0	0		0	0	0	0	0
25	0	0		0	0	0	0	0
26	0	0		0	0	0	0	0
27	0	0		0	0	0	0	0
28	0	0		0	0	0	0	0
29	0	0		0	0	0	0	0
30	0	0		0	0	0	0	0
31	0	0		0	0	0	0	0
32	0	0		0	0	0	0	0
33	0	0		0	0	0	0	0
34	0	0		0	0	0	0	0
35	0	0		0	0	0	0	0
36	0	0		0	0	0	0	0
37	0	0		0	0	0	0	0
38	0	0		0	0	0	0	0
39	0	0		0	0	0	0	0
40	0	0		0	0	0	0	0

Pri/Pre Detectors

Det	Description	Low Call	High Call	Low Num	high Num	Lead/Trail	Arrival Time	Pri Dlay	Dlay	Ext	Min On	Pri Olvp	No Act	Max Pres	Erratic Count
1		None	None	0	0	None	0	0	0	0	0		0	0	0
2		None	None	0	0	None	0	0	0	0	0		0	0	0
3		None	None	0	0	None	0	0	0	0	0		0	0	0
4		None	None	0	0	None	0	0	0	0	0		0	0	0
5		None	None	0	0	None	0	0	0	0	0		0	0	0
6		None	None	0	0	None	0	0	0	0	0		0	0	0
7		None	None	0	0	None	0	0	0	0	0		0	0	0
8		None	None	0	0	None	0	0	0	0	0		0	0	0

Overlaps

OLP	Enabled	Type	Included Phs	Modifier Phs	Modifier Ovlps	Neg Phases	Inhibit Neg Phs	Neg Ovlps
1	Disabled	Off	2	1				
2	Enabled	Off						

3	Disabled	Off	4	3				
4	Enabled	Off						
5	Disabled	Off	6	5				
6	Enabled	Off						
7	Disabled	Off	8	7				
8	Enabled	Off						
9	Enabled	Off						
10	Enabled	Off						
11	Enabled	Off						
12	Enabled	Off						
13	Enabled	Off						
14	Enabled	Off						
15	Enabled	Off						
16	Enabled	Off						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
1						
2						
3						
4						
5						
6						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

OLP	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Min Green	Mx Grn Ext	Red Revert	Flash Inactive	Flash Alt	Walk Rest
1	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
2	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
3	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
4	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
5	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
6	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
7	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
8	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
9	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
10	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
11	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
12	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
13	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
14	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
15	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
16	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off

Overlap Options

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup Call																
Recall																

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call for Service																
Trail Grn Bridge																

No Veh Reserv														
No Hold Trail Exit														
Ped Recycle														
No Yellow Protect														
No Bridging														
LRT Prepare Go														

FYA Prot. Red Cl														
Phs Intvl Override														
Queue Jump														
No FYA Ped Wlk														
Term After Call														

Custom Overlap Rules

Rule	Custom Ovlp	Incl. State	Mod. State	Neg. State	Output	Flash
1	Disable	Any		Any	Not Set	Not Set
2	Disable	Any		Any	Not Set	Not Set
3	Disable	Any		Any	Not Set	Not Set
4	Disable	Any		Any	Not Set	Not Set
5	Disable	Any		Any	Not Set	Not Set
6	Disable	Any		Any	Not Set	Not Set
7	Disable	Any		Any	Not Set	Not Set
8	Disable	Any		Any	Not Set	Not Set
9	Disable	Any		Any	Not Set	Not Set
10	Disable	Any		Any	Not Set	Not Set

Coordination Parameters

Operational Mode	Automatic
Coordination Mode	Pattern
Correction Mode	Shortway (Auto)

Maximum Mode	Per Pattern
Force Mode	Per Pattern
Transition Cover Ped	Pattern

Max Cyc Limit %	15
Min Cyc Limit %	15
Max Dwell	0

Patterns

		Offset					Ref	Coord	Force	Max	Trans	Min	Phs	Det	Ped	Ovlp	Pri	
Patt.	Cycle	1	2	3	Split	Seq	Col	Mode	Mode	Mode	Ped	Perm	Pln	Pln	Pln	Pln	Pln	Description
1	140	110	0	0	1	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	AM
2	90	36	0	0	2	3	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	MID
3	140	68	0	0	3	2	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	PM
4	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
5	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
6	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
7	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
8	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
9	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
10	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
11	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
12	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
13	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
14	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
15	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
16	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
17	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
18	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
19	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
20	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	

Split Parameters

Split 1				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	35	0	0				Fix	None	0	0	Float
2	45	0	0	X	X		Fix	Max Rcl	0	0	Float
3	15	0	0				Fix	None	0	0	Float
4	45	0	0				Fix	None	0	0	Float
5	23	0	0				Fix	None	0	0	Float
6	57	0	0	X	X		Fix	Max Rcl	0	0	Float

7	15	0	0				Fix	None	0	0	Float
8	45	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 2				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	14	0	0				Fix	None	0	0	Float
2	38	0	0	X	X		Fix	Max Rcl	0	0	Float
3	13	0	0				Fix	None	0	0	Float
4	25	0	0				Fix	None	0	0	Float
5	19	0	0				Fix	None	0	0	Float
6	33	0	0	X	X		Fix	Max Rcl	0	0	Float
7	13	0	0				Fix	None	0	0	Float
8	25	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 3				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	20	0	0				Fix	None	0	0	Float
2	58	0	0	X	X		Fix	Max Rcl	0	0	Float
3	13	0	0				Fix	None	0	0	Float
4	49	0	0				Fix	None	0	0	Float
5	41	0	0				Fix	None	0	0	Float
6	37	0	0	X	X		Fix	Max Rcl	0	0	Float
7	13	0	0				Fix	None	0	0	Float
8	49	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 4				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float

8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 5				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 7				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float

5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 8				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 10				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	Non			

CDOT

MaxTime Timing Sheet

2.0.16 Update

Administration

Cross Black_White.jpg

Unit Information

Controller ID	0
Main St.	94A
Side St.	Marksheffel

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	Mode
1				Disable	Static
2				Disable	Static

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	1
All Red Exit	0
MCE Seq.	1
Master By TOD	Disable

Auto Ped Clr	Enable
Grn Flash Freq.	60
Start Yellow	0.0
Flash CVM	Disable

Red Revert	4.0
Yel Flash Freq.	60
Start Red	0.0
All Red Flash	Enable
Auto Ped Clear	Enable

Backup Time	600
MCE Enable	Enable
Start Clear Hold	6
3 Phs Dia Seq	
4 Phs Dia Seq	

Ext Mode	Disable
Free Seq.	1

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	20	5	10	5	20	6	10	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	1.0	4.0	3.0	6.0	1.0	4.0	3.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	0	45	6	47	0	45	26	27	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conditional Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	6.0	3.5	6.0	3.0	6.0	3.5	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	3.0	1.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ped Service Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre Clearance 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Jump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Warning Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable		X	X	X		X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry		X		X		X		X												
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher		X				X														
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				
Coord Ped Yield																				
Ped Recycle																				
Coutdown																				

No Serve Phases

Sequence 1	
Ph.	No Serve Phases
1	
2	

Sequence 2	
Ph.	No Serve Phases
1	
2	

Sequence 3	
Ph.	No Serve Phases
1	
2	

Sequence 4	
Ph.	No Serve Phases
1	
2	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

Sequence 1	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4	
9	
10	
11	
12	
13	
14	
15	
16	

Phase Configuration

Ph.	Startup	Ring	Concurrent	Startup Min	Description
1	Phase Not On	0		0	
2	Green No Walk	1	6	0	
3	Phase Not On	1	7,8	0	
4	Phase Not On	1	7,8	0	
5	Phase Not On	0		0	
6	Green No Walk	2	2	0	
7	Phase Not On	2	3,4	0	
8	Phase Not On	2	3,4	0	
9	None	0		0	
10	None	0		0	
11	None	0		0	
12	None	0		0	
13	None	0		0	
14	None	0		0	
15	None	0		0	
16	None	0		0	
17	None	0		0	
18	None	0		0	
19	None	0		0	
20	None	0		0	

Sequence Configuration

Sequence 1

Ring	Phases
1	2,a,3,4,b
2	6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 2

Ring	Phases
1	2,a,4,3,b
2	6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 3

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15		15		15		15	
16		16		16		16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 5

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 10

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 11

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 12

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

Sequence 17

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 18

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 19

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 20

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 17

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 18

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 19

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 20

9	
10	
11	
12	
13	
14	
15	
16	

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Min				X				X												
Max																				
Ped																				
Act Walk Rest																				

Global Veh Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0
Global Failed Recall	None
Detector Reset Enable	Enabled

Global Ped Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Global Pri/Pre Det Diag

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Vehicle Detection Parameters

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
1	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
2	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
3	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
4	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
5	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
6	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
7	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
8	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
9	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
10	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
11	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
12	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
13	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
14	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
15	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

16	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
17	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
18	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
19	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
20	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
21	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
22	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
23	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
24	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
25	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
26	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
27	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
28	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
29	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
30	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
31	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
32	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
33	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
34	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
35	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
36	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
37	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
38	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
39	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
40	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
41	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
42	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
43	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
44	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
45	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
46	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
47	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
48	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
49	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
50	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
51	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
52	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
53	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
54	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
55	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
56	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
57	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
58	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
59	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
60	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
61	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
62	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
63	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
64	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
65	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
66	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
67	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
68	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
69	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

~~70~~	~~0~~	~~0~~	~~0~~		~~0~~	~~0.0~~	~~0.0~~	~~0~~	~~0.0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~None~~	~~0~~	
71	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X	X	X	X												
Added Initial																				
Queue																				
Call	X	X	X	X	X	X	X	X												
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend																				
Added Initial																				
Queue																				
Call																				
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector												
Occupancy												
Yellow Lock Call												
Red Lock call												
Extend												
Added Initial												
Queue												

Data Collection Period	0
Number of Periods	1

Call												
Terminate												
Min Green 2												
Protected Perm												
Disable Dly Lead												
Disable TS2 Diag												

Speed Detectors

Det	Enable	Type	Units	Min Log	Max Log	Car Length	Det Length	Trail Det	Trap Length
1		Single	Inches	5	80	0	0	0	0
2		Single	Inches	5	80	0	0	0	0
3		Single	Inches	5	80	0	0	0	0
4		Single	Inches	5	80	0	0	0	0
5		Single	Inches	5	80	0	0	0	0
6		Single	Inches	5	80	0	0	0	0
7		Single	Inches	5	80	0	0	0	0
8		Single	Inches	5	80	0	0	0	0

Pedestrian Detectors

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
1	0	0		0	0	0	0	0
2	2	0		0	0	0	0	0
3	0	0		0	0	0	0	0
4	4	0		0	0	0	0	0
5	0	0		0	0	0	0	0
6	6	0		0	0	0	0	0
7	0	0		0	0	0	0	0
8	8	0		0	0	0	0	0
9	0	0		0	0	0	0	0
10	0	0		0	0	0	0	0
11	0	0		0	0	0	0	0
12	0	0		0	0	0	0	0
13	0	0		0	0	0	0	0
14	0	0		0	0	0	0	0
15	0	0		0	0	0	0	0
16	0	0		0	0	0	0	0
17	0	0		0	0	0	0	0
18	0	0		0	0	0	0	0
19	0	0		0	0	0	0	0
20	0	0		0	0	0	0	0

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
21	0	0		0	0	0	0	0
22	0	0		0	0	0	0	0
23	0	0		0	0	0	0	0
24	0	0		0	0	0	0	0
25	0	0		0	0	0	0	0
26	0	0		0	0	0	0	0
27	0	0		0	0	0	0	0
28	0	0		0	0	0	0	0
29	0	0		0	0	0	0	0
30	0	0		0	0	0	0	0
31	0	0		0	0	0	0	0
32	0	0		0	0	0	0	0
33	0	0		0	0	0	0	0
34	0	0		0	0	0	0	0
35	0	0		0	0	0	0	0
36	0	0		0	0	0	0	0
37	0	0		0	0	0	0	0
38	0	0		0	0	0	0	0
39	0	0		0	0	0	0	0
40	0	0		0	0	0	0	0

Pri/Pre Detectors

Det	Description	Low Call	High Call	Low Num	high Num	Lead/Trail	Arrival Time	Pri Dlay	Dlay	Ext	Min On	Pri Olvp	No Act	Max Pres	Erratic Count
1		None	None	0	0	None	0	0	0	0	0		0	0	0
2		None	None	0	0	None	0	0	0	0	0		0	0	0
3		None	None	0	0	None	0	0	0	0	0		0	0	0
4		None	None	0	0	None	0	0	0	0	0		0	0	0
5		None	None	0	0	None	0	0	0	0	0		0	0	0
6		None	None	0	0	None	0	0	0	0	0		0	0	0
7		None	None	0	0	None	0	0	0	0	0		0	0	0
8		None	None	0	0	None	0	0	0	0	0		0	0	0

Overlaps

OLP	Enabled	Type	Included Phs	Modifier Phs	Modifier Ovlps	Neg Phases	Inhibit Neg Phs	Neg Ovlps
1	Disabled	Off	2	1				
2	Enabled	Off						

3	Enabled	FYA - 4 Sec	4	3				
4	Enabled	Off						
5	Disabled	Off	6	5				
6	Enabled	Off						
7	Enabled	FYA - 4 Sec	8	7				
8	Enabled	Off						
9	Enabled	Off						
10	Enabled	Off						
11	Enabled	Off						
12	Enabled	Off						
13	Enabled	Off						
14	Enabled	Off						
15	Enabled	Off						
16	Enabled	Off						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
1						
2						
3						
4						
5						
6						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

OLP	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Min Green	Mx Grn Ext	Red Revert	Flash Inactive	Flash Alt	Walk Rest
1	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
2	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
3	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
4	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
5	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
6	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
7	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
8	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
9	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
10	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
11	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
12	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
13	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
14	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
15	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
16	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off

Overlap Options

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup Call																
Recall																

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call for Service																
Trail Grn Bridge																

No Veh Reserv														
No Hold Trail Exit														
Ped Recycle														
No Yellow Protect														
No Bridging														
LRT Prepare Go														

FYA Prot. Red Cl														
Phs Intvl Override														
Queue Jump														
No FYA Ped Wlk														
Term After Call														

Custom Overlap Rules

Rule	Custom Ovlp	Incl. State	Mod. State	Neg. State	Output	Flash
1	Disable	Any		Any	Not Set	Not Set
2	Disable	Any		Any	Not Set	Not Set
3	Disable	Any		Any	Not Set	Not Set
4	Disable	Any		Any	Not Set	Not Set
5	Disable	Any		Any	Not Set	Not Set
6	Disable	Any		Any	Not Set	Not Set
7	Disable	Any		Any	Not Set	Not Set
8	Disable	Any		Any	Not Set	Not Set
9	Disable	Any		Any	Not Set	Not Set
10	Disable	Any		Any	Not Set	Not Set

Coordination Parameters

Operational Mode	Automatic
Coordination Mode	Pattern
Correction Mode	Shortway (Auto)

Maximum Mode	Per Pattern
Force Mode	Per Pattern
Transition Cover Ped	Pattern

Max Cyc Limit %	15
Min Cyc Limit %	15
Max Dwell	0

Patterns

		Offset					Ref	Coord	Force	Max	Trans	Min	Phs	Det	Ped	Ovlp	Pri	
Patt.	Cycle	1	2	3	Split	Seq	Col	Mode	Mode	Mode	Ped	Perm	Pln	Pln	Pln	Pln	Pln	Description
1	140	81	0	0	1	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	AM
2	90	44	0	0	2	2	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	MID
3	140	66	0	0	3	2	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	PM
4	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
5	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
6	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
7	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
8	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
9	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
10	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
11	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
12	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
13	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
14	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
15	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
16	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
17	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
18	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
19	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
20	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	

Split Parameters

Split 1				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	60	0	0				Fix	None	0	0	Float
3	15	0	0				Fix	None	0	0	Float
4	65	0	0	X	X		Fix	Max Rcl	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	60	0	0				Fix	None	0	0	Float

~~7~~	~~45~~	~~0~~	~~0~~				~~Fix~~	~~None~~	~~0~~	~~0~~	~~Float~~
8	35	0	0	X	X		Fix	Max Rcl	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 2				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	36	0	0				Fix	None	0	0	Float
3	17	0	0				Fix	None	0	0	Float
4	37	0	0	X	X		Fix	Max Rcl	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	36	0	0				Fix	None	0	0	Float
7	18	0	0				Fix	None	0	0	Float
8	36	0	0	X	X		Fix	Max Rcl	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 3				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	60	0	0				Fix	None	0	0	Float
3	20	0	0				Fix	None	0	0	Float
4	60	0	0	X	X		Fix	Max Rcl	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	60	0	0				Fix	None	0	0	Float
7	25	0	0				Fix	None	0	0	Float
8	55	0	0	X	X		Fix	Max Rcl	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 4				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float

8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 5				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 7				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float

5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 8				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 10				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float

3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Ring Plan 1

Ring	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Offset	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Early Coord Gap Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 1 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 4 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 5 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 6 Off

Month of Year						Days of Week							Days of Month													

J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 7 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 8 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 9 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 10 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 0 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 1

Event	Hour	Min.	Act
1	5	30	1
2	9	0	2
3	14	0	3
4	18	0	10
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
1	7	30	2
2	18	0	10
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 10

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 11

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 12

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 13

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 14

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 15

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 16

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

7	0	0		7	0	0		7	0	0		7	0	0	
8	0	0		8	0	0		8	0	0		8	0	0	
9	0	0		9	0	0		9	0	0		9	0	0	
10	0	0		10	0	0		10	0	0		10	0	0	

Day Plan 17

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 18

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 19

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 20

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Free											
11	None											
12	None											
13	None											
14	None											
15	None											
16	None											
17	None											
18	None											
19	None											
20	None											
21	None											
22	None											
23	None											
24	None											
25	None											
26	None											
27	None											
28	None											
29	None											
30	None											
31	None											
32	None											

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
33	None											
34	None											
35	None											
36	None											
37	None											
38	None											
39	None											
40	None											
41	None											
42	None											
43	None											
44	None											
45	None											
46	None											
47	None											
48	None											
49	None											
50	None											
51	None											
52	None											
53	None											
54	None											
55	None											
56	None											
57	None											
58	None											
59	None											
60	None											
61	None											
62	None											
63	None											
64	None											

Action Commands

Action 1

Cmd	Command	Indexes
1	None	
2	None	

Action 2

Cmd	Command	Indexes
1	None	
2	None	

3	None	
4	None	
5	None	
6	None	
7	None	
8	None	
9	None	
10	None	

3	None	
4	None	
5	None	
6	None	
7	None	
8	None	
9	None	
10	None	

Master Sections By TOD

Action	1	2	3	4	5	6	7	8	9	10
Master Section 1										
Master Section 2										
Master Section 3										
Master Section 4										
Master Section 5										
Master Section 6										
Master Section 7										
Master Section 8										
Master Section 9										
Master Section 10										
Master Section 11										
Master Section 12										
Master Section 13										
Master Section 14										
Master Section 15										
Master Section 16										

Queue Responsive By TOD

Action	1	2	3	4	5	6	7	8	9	10
Queue Resp Plan 1										
Queue Resp Plan 2										
Queue Resp Plan 3										
Queue Resp Plan 4										
Queue Resp Plan 5										
Queue Resp Plan 6										
Queue Resp Plan 7										
Queue Resp Plan 8										
Queue Resp Plan 9										
Queue Resp Plan 10										
Queue Resp Plan 11										
Queue Resp Plan 12										
Queue Resp Plan 13										
Queue Resp Plan 14										
Queue Resp Plan 15										
Queue Resp Plan 16										

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	0	0	0	0	0	0
Min Presence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Presence	0	0	0	0	0	0	0	0
Enter Min Green	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Max Track Grn	0	0	0	0	0	0	0	0
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Green	0	0	0	0	0	0	0	0
Track 2 Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Ext Gate Dn	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Dwell Ext Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Exit Green	0	0	0	0	0	0	0	0
Exit Max Time	0	0	0	0	0	0	0	0

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								
Ped Recycle								
Imm Ped Clear								
Dwell Only Status								
All Red Flash Dwell								
Allow All Overlaps								
Req All Red Entry								
Req Gate Dwn Trck Exit								
Req Gate Up Dwl Exit								
Normal On/Off Input								
Track Clear Override								
Aux Function 1								
Aux Function 2								
Aux Function 3								
Special Function 1								
Special Function 2								
Special Function 3								
Special Function 4								
Special Function 5								
Special Function 6								
Special Function 7								
Special Function 8								

Require CRC
Disabled

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Sp F9	Sp F11	Sp F13	Sp F15
Sp F10	Sp F12	Sp F14	Sp F16

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Type	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh
Description								
Track Phases								
Track 2 Phases								
Track Overlaps								
Track 2 Overlaps								
Dwell Phase								
Dwell Ped								
Dwell Overlaps								
Cycling Phases								
Cycling Peds								
Cycling Overlaps								
Exit Phases								
Exit Overlaps								
Exit Veh Calls								
Exit Ped Calls								
Recovery Omit Phs								
Max Pres Action	0	0	0	0	0	0	0	0
Exit Type	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases
Exit Max Mode	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled

Cabinet Config

Run ITS on NEMA port 1	No	Enable TS2/ATC Stop Time		Disable TS2 Fault Flash	
Run ITS on 2070-1C C13S	No	Disable TS2 Startup Call		Disable TS2 Cab. Alarms	

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source	MMU Channel
1	None	1	1
2	Phs Veh	2	2
3	Olp	3	3
4	Phs Veh	4	4
5	None	5	5
6	Phs Veh	6	6
7	Olp	7	7
8	Phs Veh	8	8
9	None	2	9
10	None	3	10

Chan	Ctrl Type	Source	MMU Channel
11	None	6	11
12	None	7	12
13	None	2	13
14	None	4	14
15	None	6	15
16	None	8	16
17	None	0	17
18	None	0	18
19	None	0	19
20	None	0	20

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow		X				X										
Flash Red	X		X	X	X		X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	Not Act	On	Off	Off	Red

Interval	Description	Red	Yel	Grn	Type
7	Pre Clr	Off	Off	On	Green

2	Dly Grn	On	Off	Off	Red
3	Pre Grn	Off	Off	On	Green
4	Min Grn	Off	Off	On	Green
5	Grn Ext	Off	Off	On	Green
6	Grn Dwell	Off	Off	On	Green

8	Yel Change	Off	On	Off	Yellow
9	Red Clr	On	Off	Off	Red
10	Red Dwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12	Pre Clr 2	Off	Off	Off	Not Def

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	Not Active	On	Off	Off	Dont Walk
2	Dly Ped	On	Off	Off	Dont Walk
3	Walk	Off	Off	On	Walk
4	Walk Dwell	Off	Off	On	Walk
5	Flsh DWalk	Flash	Off	Off	Ped Clear
6	DWalk	On	Off	Off	Dont Walk

Alarm Config

Alarm	Name
1	
2	
3	
4	
5	

Alarm	Name
6	
7	
8	
9	
10	

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Enabled	Lock Out Time	PRS Time to Live
No	0	300

Prioritor	Enabled	Priority	Priority Phs	Skipped Phs	Skip Peds	Delay Time	Est Travel	Mx Presence	Output Dly
1	On	0				0	0	0	0
2	On	0				0	0	0	0
3	On	0				0	0	0	0
4	On	0				0	0	0	0
5	On	0				0	0	0	0
6	On	0				0	0	0	0
7	On	0				0	0	0	0
8	On	0				0	0	0	0

Prioritor	Res. Lockout	Free Pri Min	Free Pri Max	Description
1	0	Min Green	Max Green	
2	0	Min Green	Max Green	
3	0	Min Green	Max Green	
4	0	Min Green	Max Green	
5	0	Min Green	Max Green	
6	0	Min Green	Max Green	
7	0	Min Green	Max Green	
8	0	Min Green	Max Green	

Prioritor	1	2	3	4	5	6	7	8
Lock After First Serve								
Pres. Only Check-in								
Extend Walk Rest								

PRS Reservice Times

Class	1	2	3	4	5	6	7	8	9	10
Time	0	0	0	0	0	0	0	0	0	0

Peer Configuration

Ctrl	Peer ID	Device Type	IP address	IP Port	Http Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0	Peer MaxTime		161	80	0	0	0	15	
2	0	Peer MaxTime		161	80	0	0	0	15	
3	0	Peer MaxTime		161	80	0	0	0	15	
4	0	Peer MaxTime		161	80	0	0	0	15	
5	0	Peer MaxTime		161	80	0	0	0	15	
6	0	Peer MaxTime		161	80	0	0	0	15	
7	0	Peer MaxTime		161	80	0	0	0	15	
8	0	Peer MaxTime		161	80	0	0	0	15	
9	0	Peer MaxTime		161	80	0	0	0	15	
10	0	Peer MaxTime		161	80	0	0	0	15	

Master Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

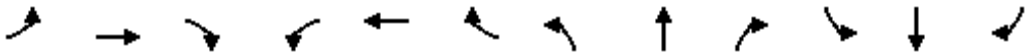
User Program Info

Pgrm	Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Pgrm	Description
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	

APPENDIX F

Queueing Analysis Worksheets



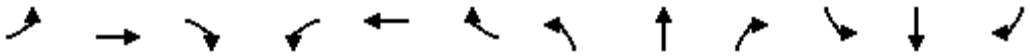
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	375	573	130	365	1266	21	5	786	109	10	1068	792
v/c Ratio	0.74	0.46	0.09	0.78	1.01	0.01	0.08	0.65	0.07	0.15	0.91	0.52
Control Delay	88.4	25.8	0.1	69.7	71.2	0.0	66.0	45.4	0.1	69.2	55.2	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.4	25.8	0.1	69.7	71.2	0.0	66.0	45.4	0.1	69.2	55.2	1.3
Queue Length 50th (ft)	188	102	0	167	~668	0	5	290	0	9	474	0
Queue Length 95th (ft)	#286	153	0	214	#827	0	m16	398	0	29	#619	0
Internal Link Dist (ft)		1511			2597			1201			1023	
Turn Bay Length (ft)	1000		575	1000		700	300		375	375		
Base Capacity (vph)	504	1245	1455	685	1258	1553	68	1206	1568	127	1205	1524
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.46	0.09	0.53	1.01	0.01	0.07	0.65	0.07	0.08	0.89	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



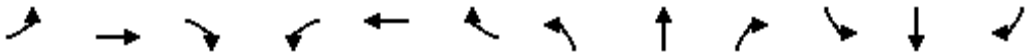
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	684	1224	128	214	597	20	15	1214	250	20	934	520
v/c Ratio	0.82	0.97	0.08	0.67	0.83	0.01	0.15	0.89	0.16	0.31	0.70	0.33
Control Delay	58.6	83.5	0.1	71.6	64.0	0.0	66.1	50.6	0.2	78.2	39.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	83.5	0.1	71.6	64.0	0.0	66.1	50.6	0.2	78.2	39.8	0.6
Queue Length 50th (ft)	343	~654	0	98	~342	0	12	440	0	18	307	0
Queue Length 95th (ft)	406	#904	m0	138	#486	0	m27	485	0	47	456	0
Internal Link Dist (ft)		1511			2597			1201			1023	
Turn Bay Length (ft)	1000		575	1000		700	300		375	375		
Base Capacity (vph)	895	1261	1583	425	722	1568	101	1453	1583	65	1483	1568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.97	0.08	0.50	0.83	0.01	0.15	0.84	0.16	0.31	0.63	0.33

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

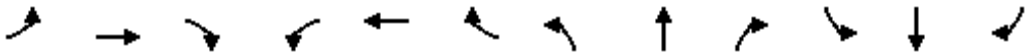
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	443	672	146	453	1484	26	5	1146	167	16	1385	927
v/c Ratio	0.83	0.41	0.10	0.83	0.85	0.02	0.10	0.74	0.11	0.25	0.86	0.61
Control Delay	91.8	26.4	0.1	69.9	48.7	0.0	56.8	49.8	0.1	74.3	50.4	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.8	26.4	0.1	69.9	48.7	0.0	56.8	49.8	0.1	74.3	50.4	1.8
Queue Length 50th (ft)	221	88	0	207	475	0	5	345	0	14	421	0
Queue Length 95th (ft)	#304	104	0	261	#545	0	m15	442	0	40	#548	0
Internal Link Dist (ft)		1511			2597			1917			1023	
Turn Bay Length (ft)	1000		575	1000		700	300		375	375		
Base Capacity (vph)	537	1657	1455	649	1738	1553	50	1553	1568	69	1610	1524
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.41	0.10	0.70	0.85	0.02	0.10	0.74	0.11	0.23	0.86	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



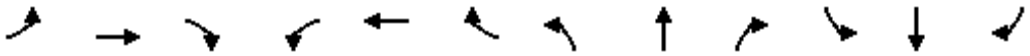
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	801	1444	209	332	704	20	20	1801	352	26	1592	612
v/c Ratio	0.90	0.91	0.13	0.89	0.87	0.01	0.33	0.91	0.22	0.42	0.81	0.39
Control Delay	58.2	77.1	0.1	86.7	69.4	0.0	74.2	43.8	0.3	86.2	41.7	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.2	77.1	0.1	86.7	69.4	0.0	74.2	43.8	0.3	86.2	41.7	0.7
Queue Length 50th (ft)	~404	~513	0	157	234	0	18	427	0	24	473	0
Queue Length 95th (ft)	#535	#624	m0	#251	#312	0	m36	477	0	58	522	0
Internal Link Dist (ft)		1511			2597			1917			1023	
Turn Bay Length (ft)	1000		575	1000		700	300		375	375		
Base Capacity (vph)	890	1582	1583	373	813	1568	60	2008	1583	62	2025	1568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.91	0.13	0.89	0.87	0.01	0.33	0.90	0.22	0.42	0.79	0.39

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	93	510	845	98	5	438	1015	655	5	1918	67
v/c Ratio	0.26	1.45	0.33	1.03	0.32	0.00	1.22	0.34	0.45	0.02	0.74	0.08
Control Delay	67.0	316.0	0.6	101.9	57.4	0.0	155.2	12.4	1.0	15.2	29.5	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.0	316.0	0.6	101.9	57.4	0.0	155.2	12.4	1.0	15.2	29.5	1.4
Queue Length 50th (ft)	21	~115	0	~280	71	0	~202	138	0	2	391	0
Queue Length 95th (ft)	42	#234	0	#385	133	m0	#316	211	0	m3	m410	m3
Internal Link Dist (ft)		543			2360			1172			881	
Turn Bay Length (ft)	375			475		475	900		600	800		800
Base Capacity (vph)	226	64	1538	821	307	1553	360	3014	1468	336	2586	888
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.45	0.33	1.03	0.32	0.00	1.22	0.34	0.45	0.01	0.74	0.08

Intersection Summary

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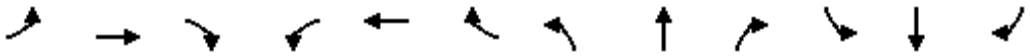
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

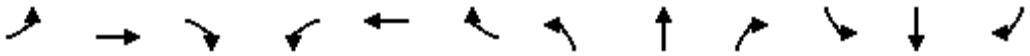
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	58	84	474	779	68	11	416	2026	658	5	1053	63
v/c Ratio	0.35	0.88	0.30	0.95	0.20	0.01	0.62	0.64	0.42	0.04	0.41	0.07
Control Delay	69.7	129.6	0.5	77.8	56.6	0.0	14.2	18.3	0.8	5.2	9.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	129.6	0.5	77.8	56.6	0.0	14.2	18.3	0.8	5.2	9.6	0.1
Queue Length 50th (ft)	26	78	0	263	58	0	73	379	0	1	90	0
Queue Length 95th (ft)	51	#184	0	m#338	m96	m0	96	544	0	m2	106	m0
Internal Link Dist (ft)		543			2360			1172			881	
Turn Bay Length (ft)	375			475		475	900		600	800		800
Base Capacity (vph)	331	95	1583	829	341	1568	717	3147	1568	136	2547	902
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.88	0.30	0.94	0.20	0.01	0.58	0.64	0.42	0.04	0.41	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



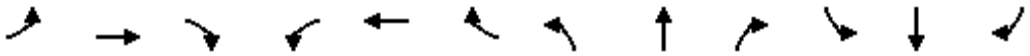
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	98	572	1191	108	5	495	1186	881	10	2258	82
v/c Ratio	0.31	1.53	0.37	1.45	0.36	0.00	1.38	0.39	0.60	0.03	0.87	0.09
Control Delay	67.5	345.0	0.7	254.9	51.2	0.0	218.3	13.1	1.8	14.3	35.0	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	345.0	0.7	254.9	51.2	0.0	218.3	13.1	1.8	14.3	35.0	2.1
Queue Length 50th (ft)	26	~124	0	~530	77	0	~258	169	0	4	476	2
Queue Length 95th (ft)	50	#247	0	#626	m135	m0	#377	257	0	m5	531	m9
Internal Link Dist (ft)		543			2360			1172			881	
Turn Bay Length (ft)	375			475		475	900		600	800		800
Base Capacity (vph)	226	64	1538	821	302	1553	360	3012	1468	291	2586	888
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.53	0.37	1.45	0.36	0.00	1.38	0.39	0.60	0.03	0.87	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	68	100	563	1221	84	11	495	2447	1226	11	1242	79
v/c Ratio	0.39	1.08	0.36	1.47	0.25	0.01	0.83	0.80	0.78	0.09	0.50	0.09
Control Delay	70.1	175.4	0.6	258.4	62.1	0.0	25.6	24.6	4.0	6.4	10.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	175.4	0.6	258.4	62.1	0.0	25.6	24.6	4.0	6.4	10.4	0.1
Queue Length 50th (ft)	31	~101	0	~553	75	0	90	532	0	2	111	0
Queue Length 95th (ft)	56	#224	0	m#504	m98	m0	144	757	0	m3	126	m0
Internal Link Dist (ft)		543			2360			1172			881	
Turn Bay Length (ft)	375			475		475	900		600	800		800
Base Capacity (vph)	331	93	1583	829	337	1568	619	3057	1568	132	2505	891
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	1.08	0.36	1.47	0.25	0.01	0.80	0.80	0.78	0.08	0.50	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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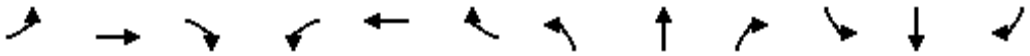
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	163	326	174	38	375	125	207	511	27	326	755	266
v/c Ratio	1.06	0.62	0.31	0.20	0.70	0.23	0.53	0.36	0.04	0.60	0.46	0.30
Control Delay	127.7	44.2	5.4	35.2	50.0	5.1	24.8	32.5	0.1	20.2	25.8	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	127.7	44.2	5.4	35.2	50.0	5.1	24.8	32.5	0.1	20.2	25.8	7.3
Queue Length 50th (ft)	~158	263	0	25	299	0	83	167	0	83	290	45
Queue Length 95th (ft)	m#244	m311	m51	51	372	38	#186	275	0	339	399	124
Internal Link Dist (ft)		2360			2852			463			968	
Turn Bay Length (ft)	300		250	225		250	375		400	400		400
Base Capacity (vph)	196	665	674	246	678	658	391	1435	718	704	1657	881
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.49	0.26	0.15	0.55	0.19	0.53	0.36	0.04	0.46	0.46	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
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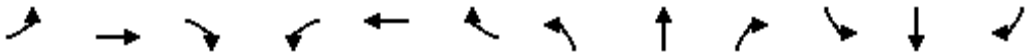
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	149	362	282	48	431	420	239	1170	32	213	899	271
v/c Ratio	0.65	0.51	0.36	0.17	0.60	0.55	0.86	0.96	0.05	0.80	0.71	0.38
Control Delay	45.7	31.9	3.4	31.0	39.0	16.2	73.5	63.8	0.2	55.4	25.4	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	31.9	3.4	31.0	39.0	16.2	73.5	63.8	0.2	55.4	25.4	3.7
Queue Length 50th (ft)	97	221	0	29	317	119	116	549	0	137	191	2
Queue Length 95th (ft)	m173	m303	m37	61	434	227	#275	#699	0	#257	249	25
Internal Link Dist (ft)		2360			2852			463			968	
Turn Bay Length (ft)	300		250	225		250	375		400	400		400
Base Capacity (vph)	231	715	775	285	715	759	277	1213	596	281	1314	727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.51	0.36	0.17	0.60	0.55	0.86	0.96	0.05	0.76	0.68	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	179	380	337	43	440	147	467	913	386	1060	299
v/c Ratio	0.90	0.40	0.53	0.19	0.46	0.27	0.66	0.51	0.76	0.46	0.38
Control Delay	81.9	39.8	7.9	38.0	42.3	6.5	24.7	34.5	28.7	28.0	18.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.9	39.8	7.9	38.0	42.3	6.5	24.7	34.5	28.7	28.0	18.4
Queue Length 50th (ft)	153	147	35	28	166	0	136	200	219	276	141
Queue Length 95th (ft)	m#263	m185	m102	62	217	50	202	225	400	417	298
Internal Link Dist (ft)		2360			2852			463		968	
Turn Bay Length (ft)	300		250	225		250	375		400		400
Base Capacity (vph)	220	1050	676	254	1070	579	746	1802	697	2312	791
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.36	0.50	0.17	0.41	0.25	0.63	0.51	0.55	0.46	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
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m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	250	426	707	53	505	511	601	1899	245	1574	303
v/c Ratio	0.96	0.33	0.89	0.18	0.40	0.71	0.80	0.95	1.11	1.05	0.54
Control Delay	74.5	30.2	27.4	32.3	34.2	25.3	33.4	30.4	124.3	71.0	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.5	30.2	27.4	32.3	34.2	25.3	33.4	30.4	124.3	71.0	17.0
Queue Length 50th (ft)	198	135	283	33	178	216	229	428	~210	~551	29
Queue Length 95th (ft)	m#348	m172	m#599	68	230	358	m263	m#543	#389	#654	146
Internal Link Dist (ft)		2360			2852			463		968	
Turn Bay Length (ft)	300		250	225		250	375		400		400
Base Capacity (vph)	261	1276	791	300	1276	724	753	1991	220	1496	561
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.33	0.89	0.18	0.40	0.71	0.80	0.95	1.11	1.05	0.54

Intersection Summary

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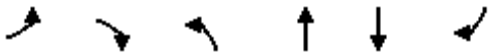
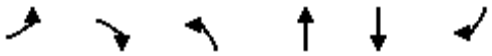


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	98	98	54	842	1413	217
v/c Ratio	0.59	0.42	0.18	0.29	0.53	0.17
Control Delay	74.9	15.6	2.7	1.7	2.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	15.6	2.7	1.7	2.7	0.6
Queue Length 50th (ft)	87	0	4	34	34	0
Queue Length 95th (ft)	145	55	10	66	155	m11
Internal Link Dist (ft)	495			910	636	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	297	347	328	2895	2682	1282
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.28	0.16	0.29	0.53	0.17

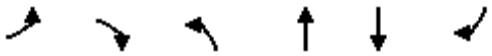
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	98	98	54	1484	1136	201
v/c Ratio	0.59	0.42	0.14	0.50	0.42	0.16
Control Delay	74.9	15.5	3.9	5.1	3.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	15.5	3.9	5.1	3.8	0.6
Queue Length 50th (ft)	87	0	9	155	12	0
Queue Length 95th (ft)	145	55	18	162	371	17
Internal Link Dist (ft)	495			910	636	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	322	368	429	2951	2733	1278
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.27	0.13	0.50	0.42	0.16

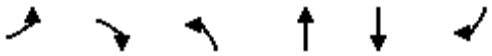
Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	109	109	60	1261	1821	239
v/c Ratio	0.62	0.43	0.27	0.31	0.48	0.19
Control Delay	75.3	14.8	9.7	1.4	2.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.3	14.8	9.7	1.4	2.3	0.4
Queue Length 50th (ft)	97	0	4	30	31	0
Queue Length 95th (ft)	156	56	29	48	90	m5
Internal Link Dist (ft)	495			910	1917	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	297	356	244	4131	3819	1278
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.31	0.25	0.31	0.48	0.19

Intersection Summary

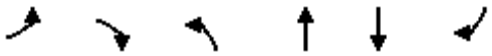
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	109	109	87	2201	1913	337
v/c Ratio	0.62	0.43	0.42	0.52	0.50	0.26
Control Delay	75.2	14.8	13.4	4.5	4.8	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	14.8	13.4	4.5	4.8	1.0
Queue Length 50th (ft)	97	0	16	140	85	0
Queue Length 95th (ft)	156	56	53	146	556	m40
Internal Link Dist (ft)	495			910	1917	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	322	377	239	4211	3799	1277
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.29	0.36	0.52	0.50	0.26

Intersection Summary

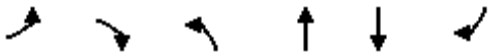
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	76	217	163	821	1402	109
v/c Ratio	0.53	0.66	0.50	0.28	0.53	0.09
Control Delay	74.3	17.5	16.6	1.9	8.4	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	17.5	16.6	1.9	8.4	2.7
Queue Length 50th (ft)	68	0	24	21	197	7
Queue Length 95th (ft)	119	79	m70	48	285	23
Internal Link Dist (ft)	358			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	284	436	427	2938	2627	1235
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.50	0.38	0.28	0.53	0.09

Intersection Summary

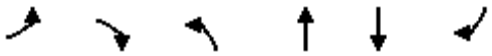
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	76	217	152	1462	1130	103
v/c Ratio	0.53	0.66	0.37	0.49	0.42	0.08
Control Delay	74.3	17.5	5.1	3.1	3.5	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	17.5	5.1	3.1	3.5	0.9
Queue Length 50th (ft)	68	0	21	110	67	0
Queue Length 95th (ft)	119	79	m28	m131	100	6
Internal Link Dist (ft)	358			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	360	495	524	2994	2694	1240
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.44	0.29	0.49	0.42	0.08

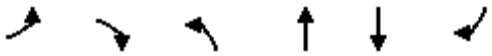
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	82	245	179	1245	1810	120
v/c Ratio	0.51	0.76	0.66	0.30	0.50	0.10
Control Delay	70.8	28.6	46.2	1.0	8.1	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.8	28.6	46.2	1.0	8.1	2.6
Queue Length 50th (ft)	73	39	68	15	164	7
Queue Length 95th (ft)	122	128	155	41	227	21
Internal Link Dist (ft)	358			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	284	422	347	4176	3623	1192
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.58	0.52	0.30	0.50	0.10

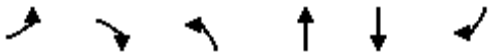
Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	82	245	255	2207	1853	168
v/c Ratio	0.53	0.73	0.73	0.52	0.54	0.15
Control Delay	72.3	24.2	33.7	2.8	5.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	24.2	33.7	2.8	5.1	0.7
Queue Length 50th (ft)	73	25	145	114	90	3
Queue Length 95th (ft)	124	113	m158	m121	112	9
Internal Link Dist (ft)	358			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	360	494	374	4270	3410	1124
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.50	0.68	0.52	0.54	0.15

Intersection Summary

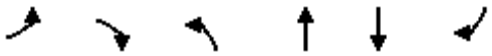
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	168	217	163	821	1402	109
v/c Ratio	0.73	0.55	0.55	0.30	0.59	0.10
Control Delay	75.9	11.8	22.5	3.3	15.3	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.9	11.8	22.5	3.3	15.3	5.3
Queue Length 50th (ft)	149	0	21	36	259	8
Queue Length 95th (ft)	220	73	m83	65	443	m32
Internal Link Dist (ft)	796			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	303	451	389	2730	2369	1122
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.48	0.42	0.30	0.59	0.10

Intersection Summary

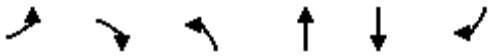
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	168	217	152	1462	1130	103
v/c Ratio	0.72	0.55	0.40	0.53	0.47	0.09
Control Delay	74.6	11.6	8.7	5.8	1.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.6	11.6	8.7	5.8	1.9	0.1
Queue Length 50th (ft)	149	0	29	152	24	0
Queue Length 95th (ft)	218	72	m39	m173	40	m0
Internal Link Dist (ft)	796			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	379	509	470	2777	2429	1129
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.43	0.32	0.53	0.47	0.09

Intersection Summary

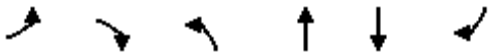
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	190	245	179	1245	1810	120
v/c Ratio	0.75	0.56	0.66	0.32	0.57	0.11
Control Delay	74.4	10.9	51.6	2.3	20.3	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.4	10.9	51.6	2.3	20.3	8.5
Queue Length 50th (ft)	168	0	81	41	289	10
Queue Length 95th (ft)	242	75	179	66	489	m56
Internal Link Dist (ft)	796			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	354	512	377	3855	3187	1059
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.48	0.47	0.32	0.57	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	190	245	255	2207	1853	168
v/c Ratio	0.75	0.56	0.76	0.56	0.61	0.17
Control Delay	75.7	11.1	34.9	10.8	8.2	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.7	11.1	34.9	10.8	8.2	1.1
Queue Length 50th (ft)	168	0	168	270	104	4
Queue Length 95th (ft)	244	76	m169	m255	m117	m6
Internal Link Dist (ft)	796			968	910	
Turn Bay Length (ft)	200		300			250
Base Capacity (vph)	328	493	446	3939	3021	1004
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.50	0.57	0.56	0.61	0.17

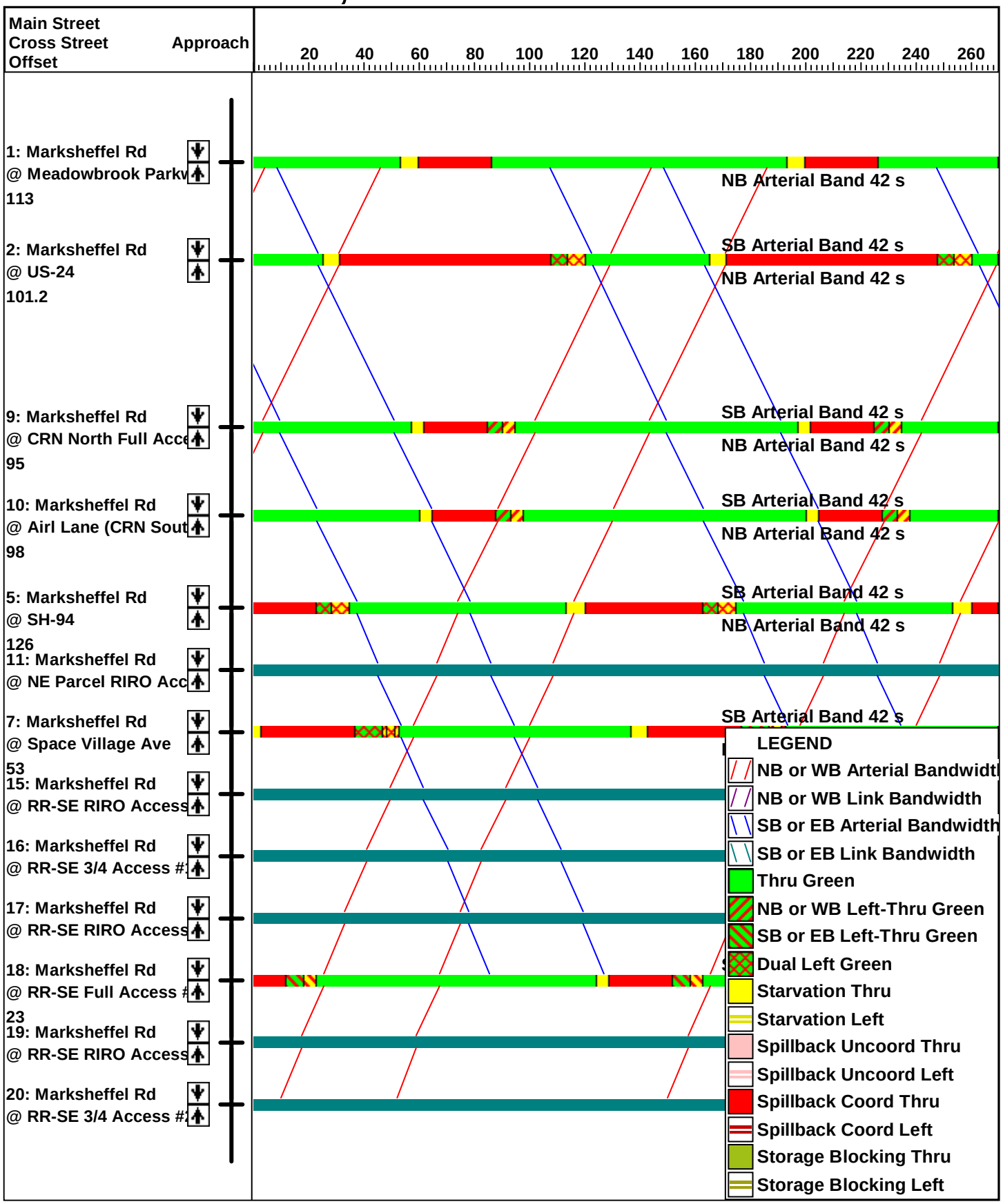
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

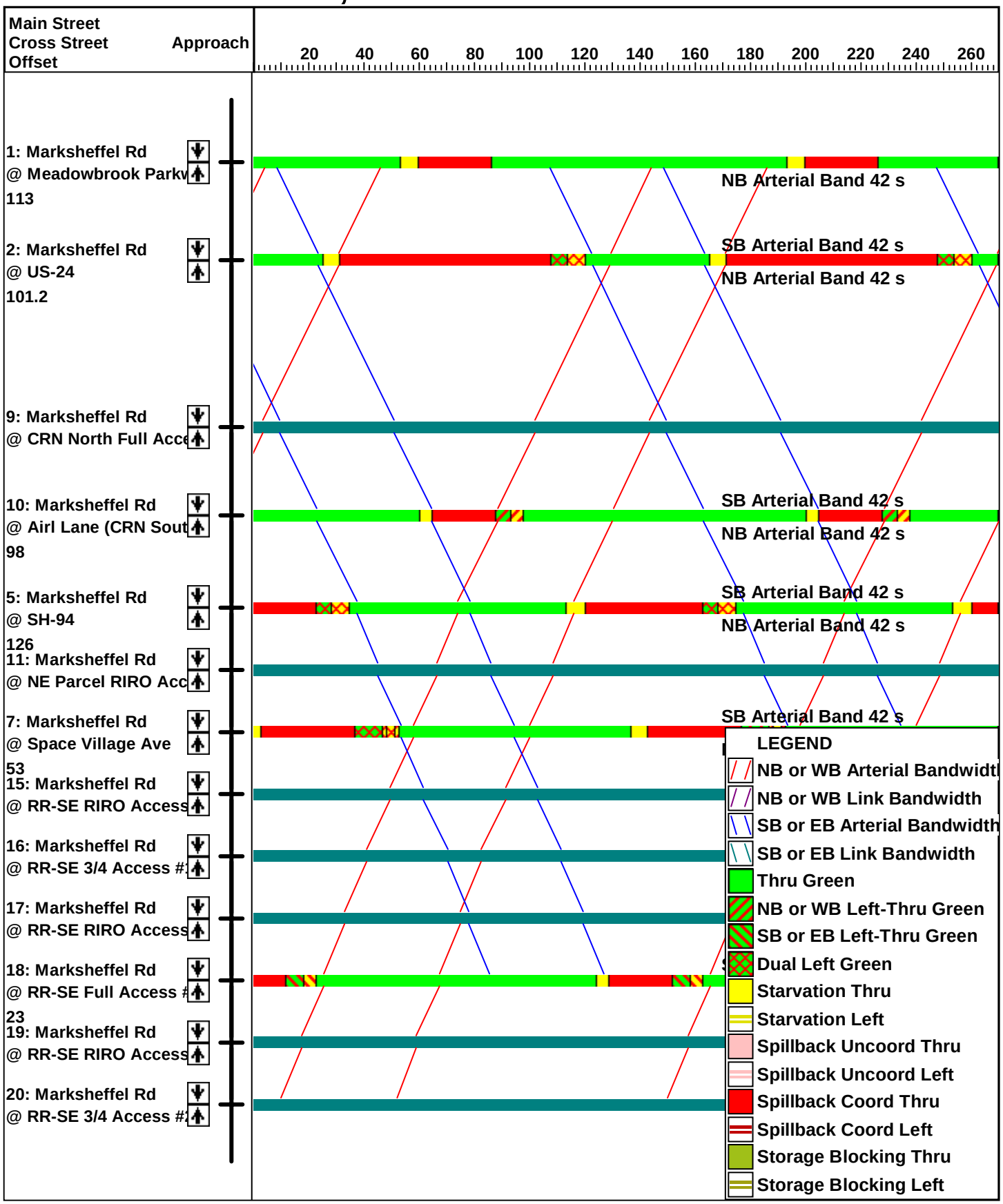
APPENDIX G

Time-Space Diagrams

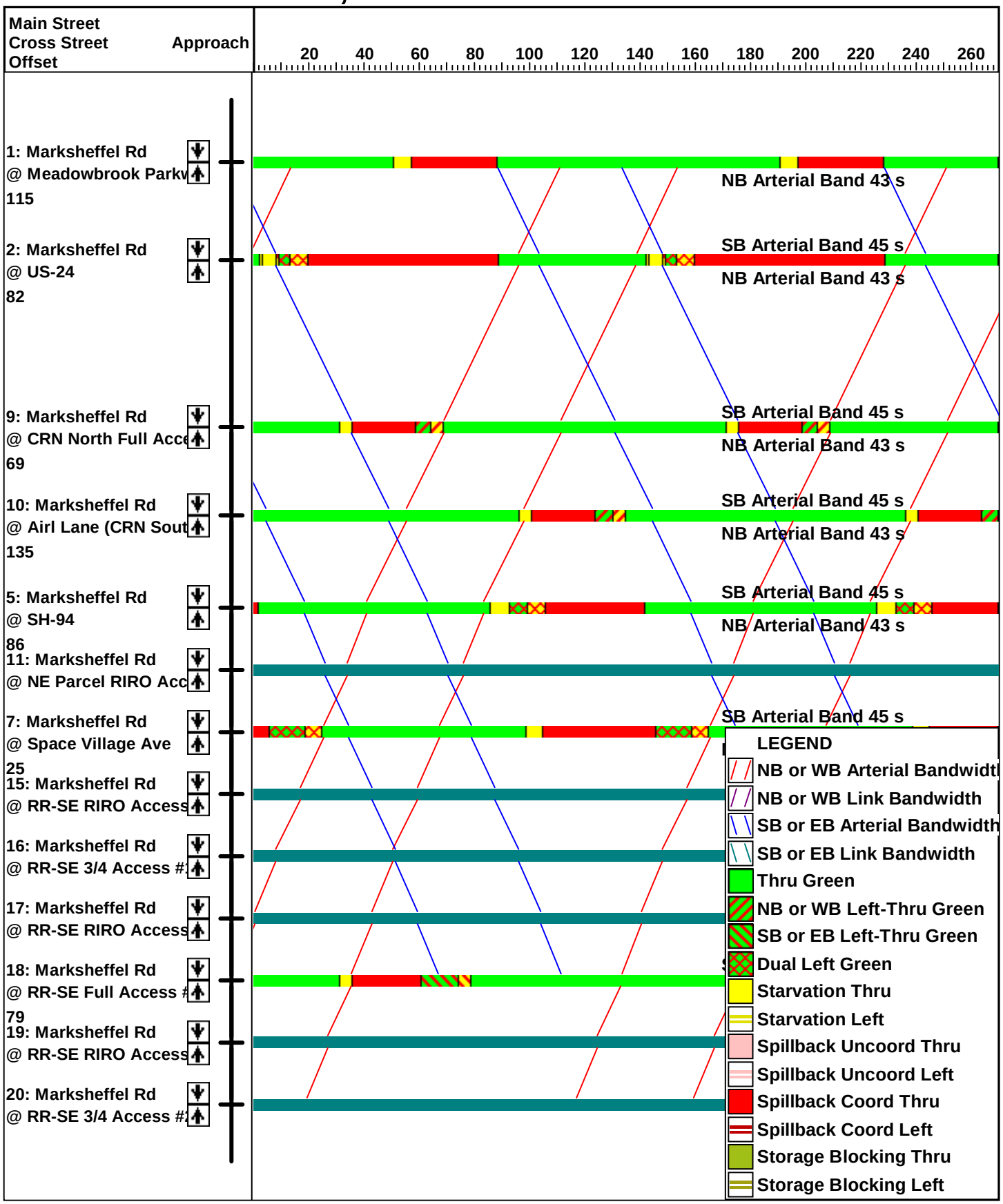
2040 Total AM, Signal (Int#9), E-W Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



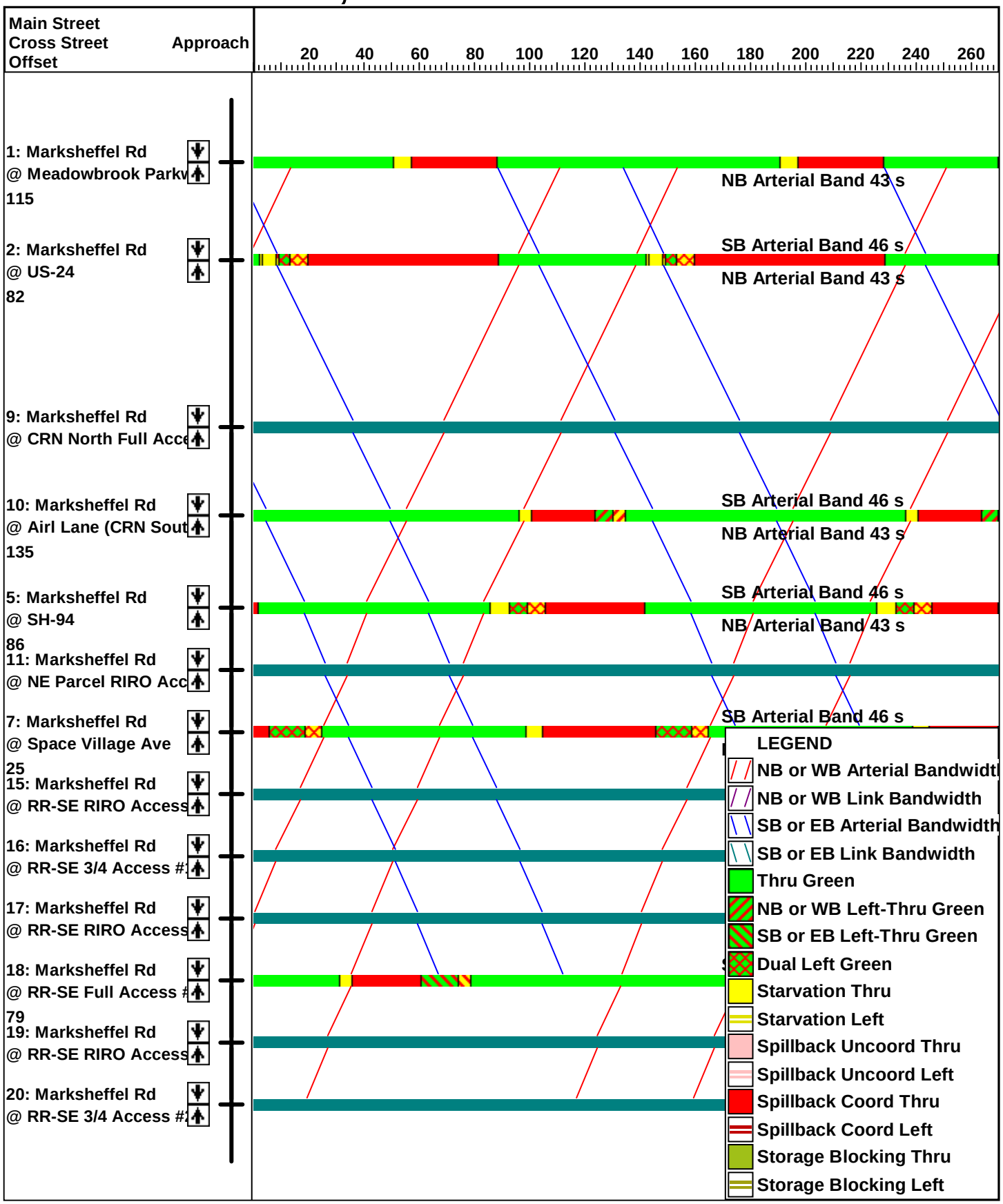
2040 Total AM, TWSC (Int#9), E-W Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



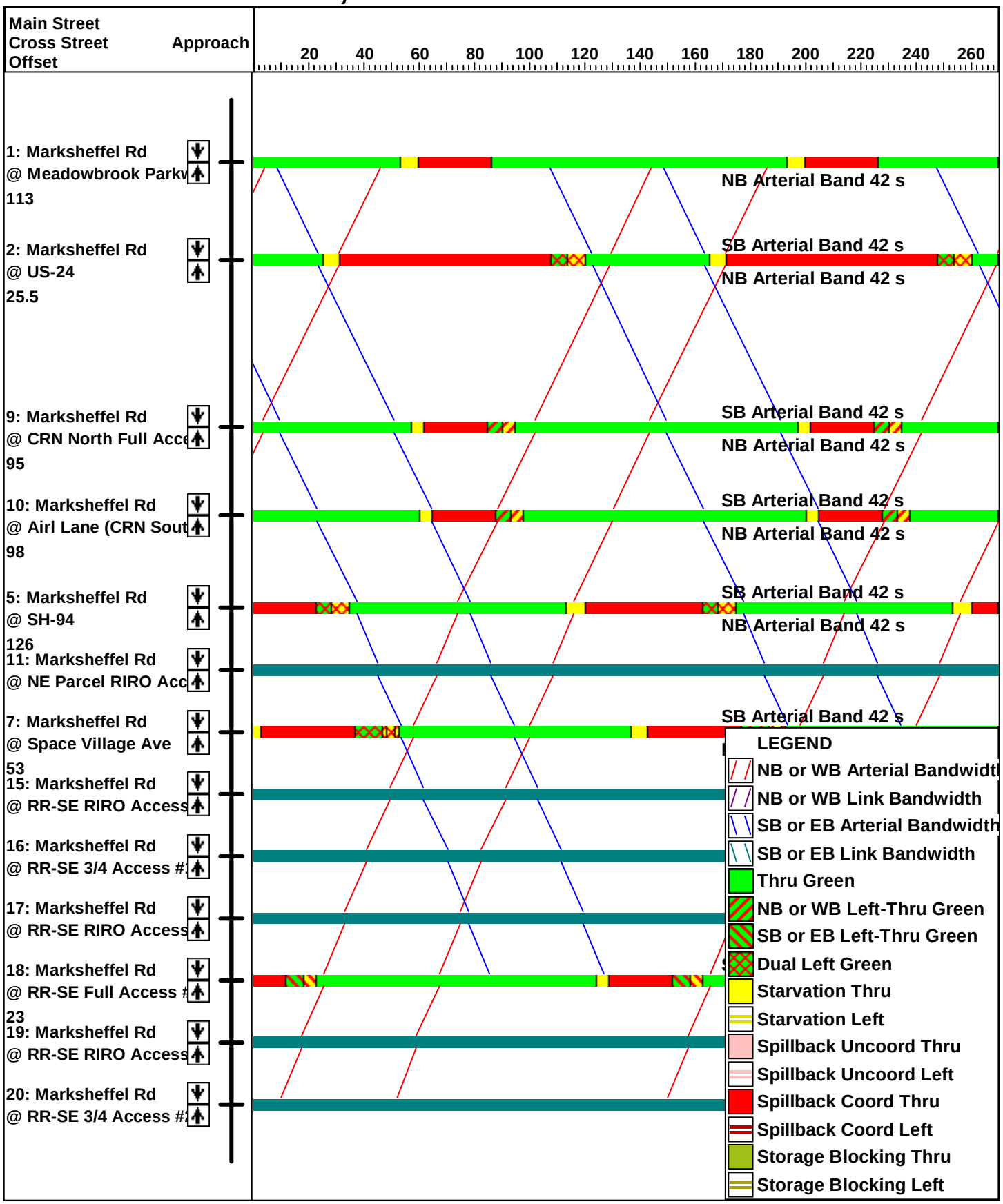
2040 Total PM, Signal (Int#9), E-W Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



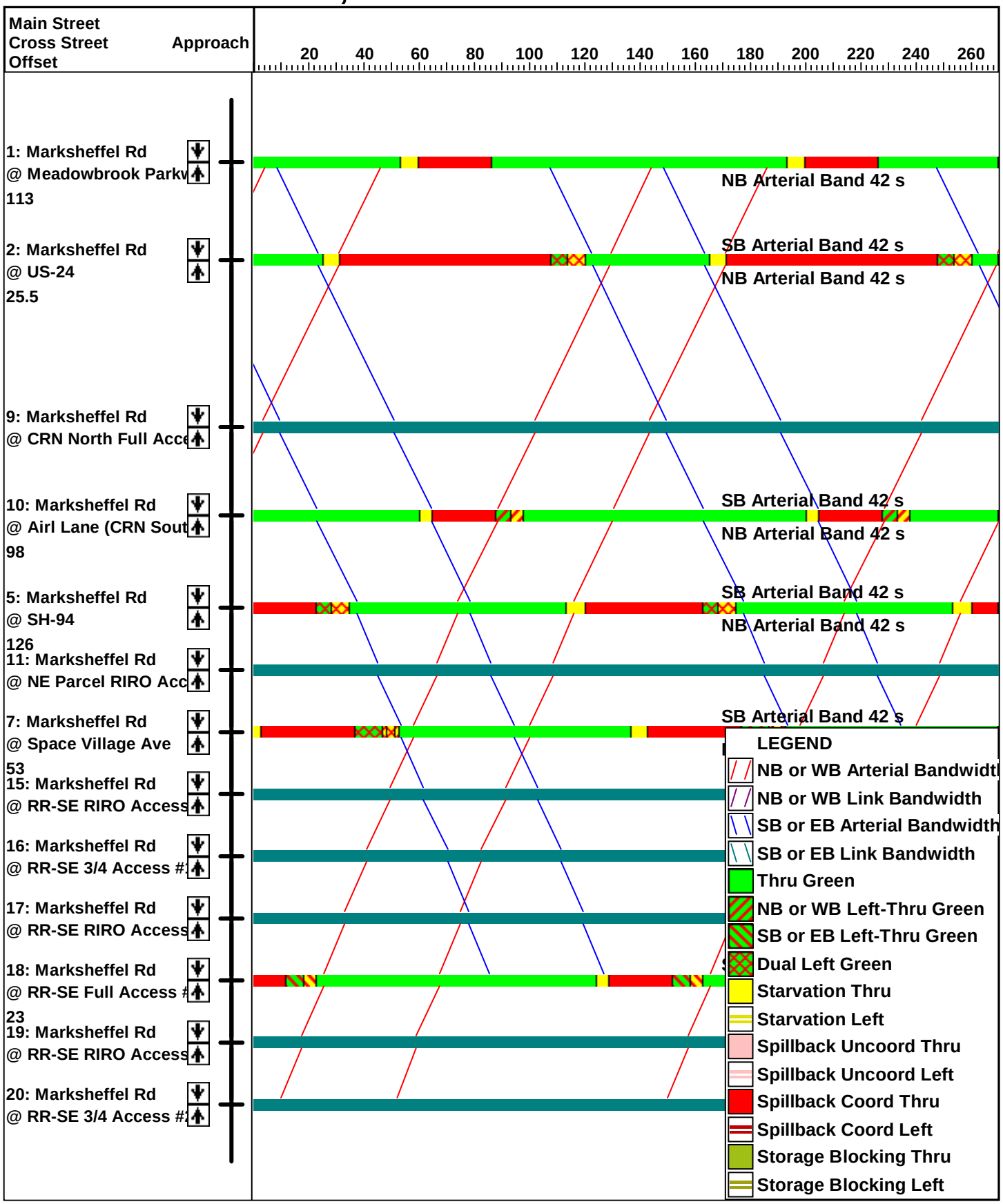
2040 Total PM, TWSC (Int#9), E-W Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



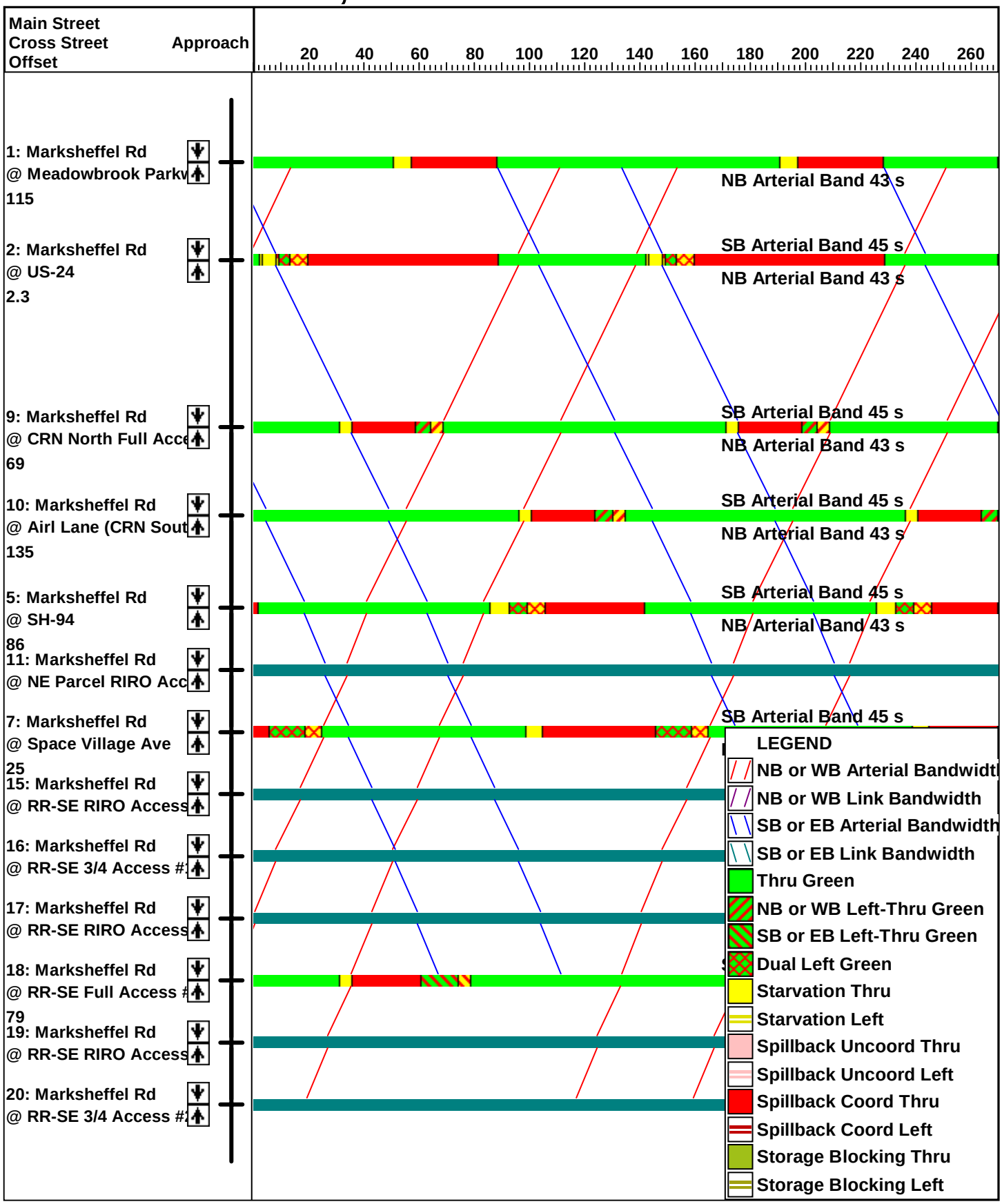
2040 Total AM, Signal (Int#9), N-S Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



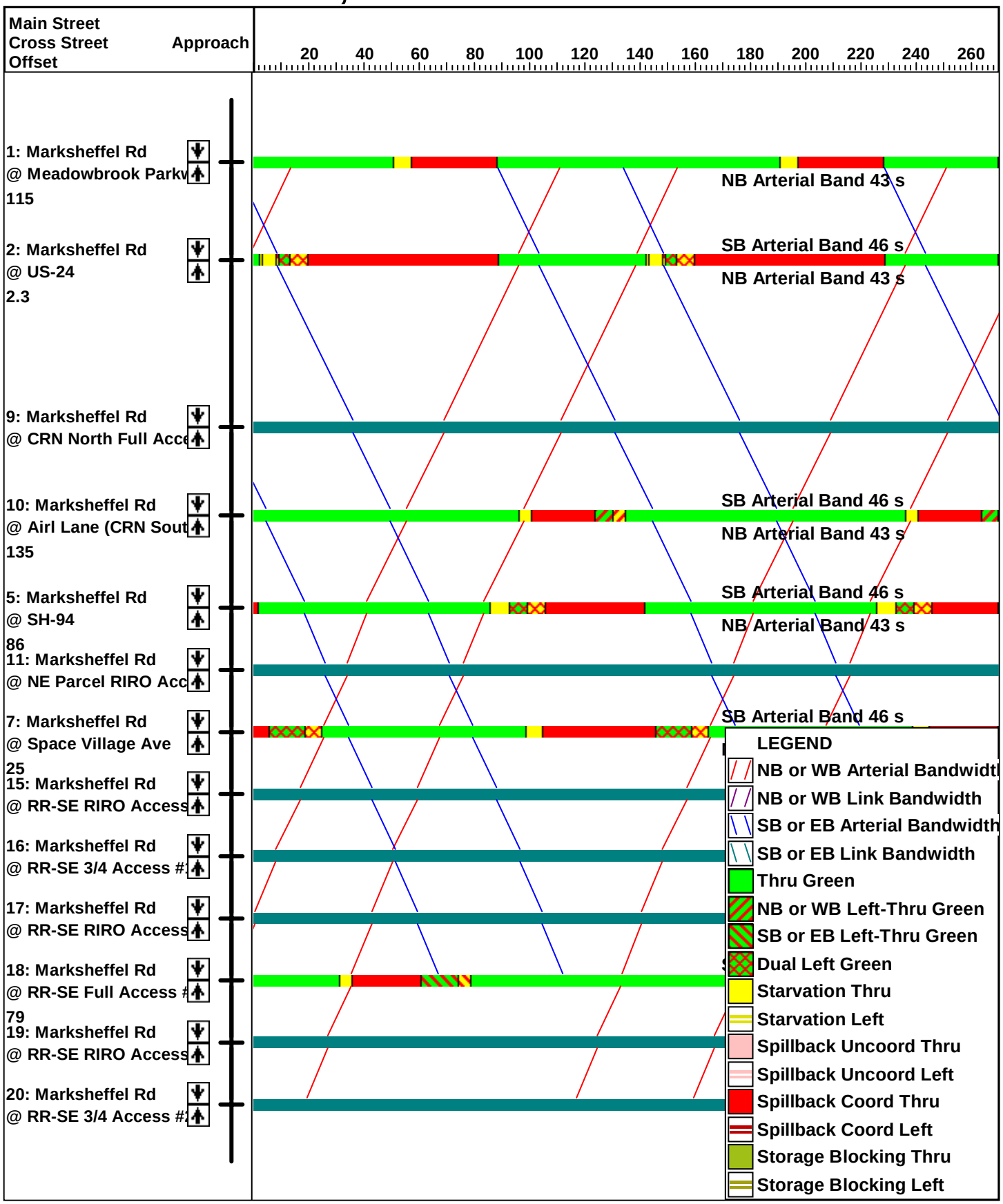
2040 Total AM, TWSC (Int#9), N-S Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



2040 Total PM, Signal (Int#9), N-S Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



2040 Total PM, TWSC (Int#9), N-S Coord (Int #2)
Arterial Bandwidths, 90th Percentile Green Times



APPENDIX H

Crash Data

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
General Summary of Crashes Report

12/08/2021

Job #: 20211208130629

Location: 24 G **Begin:** 313.17 **End:** 313.19 **From:** 01/01/2017 **To:** 12/31/2019

Severity

PDO:	17	
INJ:	18	36 :Injured
FAT:	0	0 :Killed
Total:	**35**	

Number of Vehicles

One Vehicle:	4
Two Vehicles:	29
Three or More:	2
Unknown:	0
Total:	**35**

Location

On Road:	31
Off Road:	4
Unknown:	0
Total:	**35**

Mainline/Ramps/Frontage Rds

Mainline:	35
Ramps:	0
Frontage/Ramp Intsx:	0
Frontage Roads:	0
HOV Lanes:	0
Unknown:	0
Total:	**35**

Lighting Conditions

Daylight:	24
Dawn or Dusk:	1
Dark - Lighted:	7
Dark - Unlighted:	3
Unknown:	0
Total:	**35**

Crash Rates

PDO:	40.70 *	* Per MVMT
INJ:	43.09 *	** Per 100 MVMT
FAT:	0.00 **	**Total:** 83.79 *

Crash Type

Overturning:	2
Other Non Collision:	0
Pedestrians:	0
Broadside:	6
Head On:	0
Rear End:	10
Sideswipe Same:	4
Sideswipe Opposite:	1
Approach Turn:	10
Overtaking Turn:	0
Parked Motor Vehicle:	0
Railway Vehicle:	0
Bicycles:	0
Domestic Animal:	0
Wild Animal:	0
Fixed Objects:	2
Other Objects:	0
Unknown:	0
Total:	**35**

Weather Conditions

None:	31
Rain:	1
Snow/Sleet/Hail:	1
Fog:	1
Dust:	0
Wind:	1
Unknown:	0
Total:	**35**

Road Conditions

Dry:	30
Wet:	2
Muddy:	0
Snowy:	0
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	3
Unknown:	0
Total:	**35**

Vehicle Types

	Vehicle 1	Vehicle 2	Vehicle 3
Passenger Car/Van:	12	13	1
Passenger Car/Van w/Trailer:	0	0	0
Pickup Truck/Utility Van:	6	5	0
Pickup Truck/Utility Van w/Trailer:	1	1	0
SUV:	8	11	1
SUV w/Trailer:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Busses > 15 People:	4	1	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	2	0	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	2	0	0
Other:	0	0	0
Unknown:	0	0	0
Total:	**35**	**31**	**2**

ADT: 19,073 **Length:** 0.02

US-24 and Marksheffel Road (MP 313.18) Crash Data

date	time	severity	location	vehicles	condition	lighting	weather	acctype	dir_1	vehicle_1	driver_1	factor_1	speed_1	veh_move_1	dir_2	vehicle_2	driver_2	factor_2	speed_2	veh_move_2
12/31/2019	1835	INJ	ON	2	DRY	DARK-LIGHTED	NONE	APPROACH TURN	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN		20 MAKING LEFT TURN	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
12/13/2019	2150	PDO	ON	2	DRY	DARK-LIGHTED	NONE	REAR-END	S	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		10 GOING STRAIGHT	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
12/13/2019	1605	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		5 GOING STRAIGHT	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
12/10/2019	1840	PDO	ON	2	DRY	DARK-UNLIGHTED	NONE	REAR-END	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN		5 GOING STRAIGHT	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
12/7/2019	2020	INJ	ON	2	DRY	DARK-LIGHTED	NONE	APPROACH TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		15 MAKING LEFT TURN	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
10/2/2019	1015	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	S	SUV	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		5 MAKING RIGHT TURN	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		1 MAKING RIGHT TURN
8/12/2019	1233	PDO	ON	2	DRY	DAYLIGHT	NONE	SIDESWIPE (SAME DIRECTION)	E	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		15 MAKING LEFT TURN	E	PICKUP TRUCK/UTILITY VAN W/TRAILER	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		5 MAKING LEFT TURN
7/25/2019	1840	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER UNFAMILIAR WITH AREA		15 MAKING LEFT TURN	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		50 GOING STRAIGHT
7/15/2019	1738	INJ	OFF RIGHT	1	DRY	DAYLIGHT	NONE	SIGN	S	MOTORCYCLE	ALCOHOL INVOLVED	UNKNOWN		50 MAKING RIGHT TURN			NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		
7/12/2019	1500	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	N	HIT & RUN - UNKNOWN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		1 OTHER	N	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
6/5/2019	1800	PDO	ON	2	WET	DAYLIGHT	RAIN	SIDESWIPE (SAME DIRECTION)	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		10 CHANGING LANES	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	UK	MAKING RIGHT TURN
5/14/2019	950	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		10 MAKING RIGHT TURN	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		5 SLOWING
4/14/2019	318	INJ	OFF RIGHT	1	ICY W/VIS ICY ROAD TREATMENT	DARK-LIGHTED	NONE	OVERTURNING	E	PICKUP TRUCK/UTILITY VAN	ALCOHOL/DRUGS	UNKNOWN		55 GOING STRAIGHT			NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		
3/6/2019	2105	INJ	ON	2	DRY	DARK-LIGHTED	NONE	BROADSIDE	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		5 GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
1/16/2019	2050	INJ	ON	2	DRY	DARK-UNLIGHTED	NONE	APPROACH TURN	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 MAKING LEFT TURN	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
1/7/2019	1806	INJ	ON	2	DRY	DARK-LIGHTED	WIND	APPROACH TURN	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		20 MAKING LEFT TURN	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
12/29/2018	821	INJ	ON	2	SNOWY W/VIS ICY ROAD TREATMENT	DAYLIGHT	NONE	BROADSIDE	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER INEXPERIENCE		30 MAKING RIGHT TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		60 GOING STRAIGHT
11/1/2018	1200	PDO	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		20 GOING STRAIGHT	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		20 GOING STRAIGHT
9/27/2018	710	INJ	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		60 GOING STRAIGHT	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	UK	SLOWING
8/10/2018	1845	INJ	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	S	SUV	NO IMPAIRMENT SUSPECTED	DRIVER INEXPERIENCE		15 MAKING LEFT TURN	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		60 GOING STRAIGHT
6/5/2018	1415	PDO	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	PICKUP TRUCK/UTILITY VAN W/TRAILER	NO IMPAIRMENT SUSPECTED	DRIVER UNFAMILIAR WITH AREA		15 MAKING LEFT TURN	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
4/26/2018	1600	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		10 MAKING LEFT TURN	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
4/21/2018	1820	PDO	ON	2	DRY	DAYLIGHT	NONE	SIDESWIPE (SAME DIRECTION)	N	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 MAKING RIGHT TURN	N	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 MAKING RIGHT TURN
4/4/2018	1310	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	UNKNOWN		15 MAKING LEFT TURN	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		55 GOING STRAIGHT
3/14/2018	1617	PDO	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN		20 MAKING LEFT TURN	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		60 GOING STRAIGHT
1/21/2018	1255	INJ	ON	3	ICY W/VIS ICY ROAD TREATMENT	DAYLIGHT	SNOW/SLEET/HAIL	BROADSIDE	S	SUV	NO IMPAIRMENT SUSPECTED	DISTRACTED BY PASSENGER	UK	GOING STRAIGHT	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		40 GOING STRAIGHT
9/6/2017	632	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN		30 MAKING LEFT TURN	E	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		65 GOING STRAIGHT
8/16/2017	615	INJ	ON	1	DRY	DAWN OR DUSK	NONE	OVERTURNING	NE	MOTORCYCLE	NO IMPAIRMENT SUSPECTED	DRIVER INEXPERIENCE		10 MAKING RIGHT TURN			NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		
8/2/2017	1130	PDO	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	NE	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	UNKNOWN		40 GOING STRAIGHT	N	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 GOING STRAIGHT
7/12/2017	930	INJ	ON	2	DRY	DAYLIGHT	NONE	REAR-END	E	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED		2 GOING STRAIGHT	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
6/28/2017	1643	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		0 STOPPED IN TRAFFIC
6/9/2017	1400	INJ	OFF IN MEDIAN	2	DRY	DAYLIGHT	NONE	SIDESWIPE (OPPOSITE DIRECTION)	S	SUV	ALCOHOL INVOLVED	UNKNOWN		45 WRONG WAY	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		30 GOING STRAIGHT
2/2/2017	1915	INJ	ON	2	WET	DARK-LIGHTED	FOG	APPROACH TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER UNFAMILIAR WITH AREA		40 MAKING LEFT TURN	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		49 GOING STRAIGHT

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
General Summary of Crashes Report

12/08/2021

Job #: 20211208123416

Location: 24 G **Begin:** 312.42 **End:** 312.44 **From:** 01/01/2017 **To:** 12/31/2019

Severity

PDO:	14	
INJ:	10	19 :Injured
FAT:	0	0 :Killed
Total:	**24**	

Number of Vehicles

One Vehicle:	1
Two Vehicles:	17
Three or More:	6
Unknown:	0
Total:	**24**

Location

On Road:	23
Off Road:	1
Unknown:	0
Total:	**24**

Mainline/Ramps/Frontage Rds

Mainline:	24
Ramps:	0
Frontage/Ramp Intsx:	0
Frontage Roads:	0
HOV Lanes:	0
Unknown:	0
Total:	**24**

Lighting Conditions

Daylight:	16
Dawn or Dusk:	2
Dark - Lighted:	3
Dark - Unlighted:	3
Unknown:	0
Total:	**24**

Crash Rates

PDO:	22.43 *	* Per MVMT
INJ:	16.02 *	** Per 100 MVMT
FAT:	0.00 **	**Total:** 38.45 *

Crash Type

Overturning:	0
Other Non Collision:	0
Pedestrians:	0
Broadside:	6
Head On:	0
Rear End:	12
Sideswipe Same:	1
Sideswipe Opposite:	0
Approach Turn:	4
Overtaking Turn:	0
Parked Motor Vehicle:	0
Railway Vehicle:	0
Bicycles:	0
Domestic Animal:	0
Wild Animal:	0
Fixed Objects:	1
Other Objects:	0
Unknown:	0
Total:	**24**

Weather Conditions

None:	22
Rain:	1
Snow/Sleet/Hail:	1
Fog:	0
Dust:	0
Wind:	0
Unknown:	0
Total:	**24**

Road Conditions

Dry:	21
Wet:	1
Muddy:	0
Snowy:	1
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	1
Unknown:	0
Total:	**24**

Vehicle Types

	Vehicle 1	Vehicle 2	Vehicle 3
Passenger Car/Van:	12	8	2
Passenger Car/Van w/Trailer:	0	0	0
Pickup Truck/Utility Van:	3	5	2
Pickup Truck/Utility Van w/Trailer:	0	0	0
SUV:	4	9	2
SUV w/Trailer:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Busses > 15 People:	4	0	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	0	1	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	1	0	0
Other:	0	0	0
Unknown:	0	0	0
Total:	**24**	**23**	**6**

ADT: 28,500 **Length:** 0.02

US-24 and SH-94 (MP 312.42) Crash Data

date	time	severity	location	vehicles	condition	lighting	weather	acctype	dir_1	vehicle_1	driver_1	factor_1	speed_1	veh_move_1	dir_2	vehicle_2	driver_2	factor_2	speed_2	veh_move_2
11/19/2019	1911	INJ	ON	3	DRY	DARK-LIGHTED	NONE	BROADSIDE	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	15	MAKING LEFT TURN	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	40	GOING STRAIGHT
11/4/2019	1530	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	SE	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	5	BACKING	SE	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
11/3/2019	1745	PDO	ON	2	DRY	DARK-LIGHTED	NONE	REAR-END	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	45	GOING STRAIGHT	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	10	SLOWING
7/23/2019	1715	PDO	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER INEXPERIENCE	30	MAKING LEFT TURN	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	5	MAKING LEFT TURN
6/14/2019	1524	PDO	ON	2	WET	DAYLIGHT	RAIN	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	35	GOING STRAIGHT	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	25	SLOWING
6/12/2019	1240	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	DRIVER INEXPERIENCE	45	GOING STRAIGHT	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
6/6/2019	1720	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	5	SLOWING	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
2/20/2019	2002	PDO	ON	3	DRY	DARK-LIGHTED	NONE	REAR-END	E	HIT & RUN - UNKNOWN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	UK	GOING STRAIGHT	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	3	STOPPED IN TRAFFIC
2/16/2019	1310	INJ	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	65	GOING STRAIGHT	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	25	GOING STRAIGHT
2/11/2019	1615	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	SUV	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	65	GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
12/12/2018	1815	INJ	ON	3	DRY	DARK-UNLIGHTED	NONE	REAR-END	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	45	SLOWING	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
11/27/2018	657	PDO	ON	2	WET W/VIS ICY ROAD TREATMENT	DAYLIGHT	NONE	BROADSIDE	E	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	OTHER	N	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
11/5/2018	648	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	15	MAKING LEFT TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	60	SLOWING
9/24/2018	1614	PDO	ON	3	DRY	DAYLIGHT	NONE	REAR-END	E	SUV	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	25	GOING STRAIGHT	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
5/7/2018	1600	PDO	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	E	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	5	MAKING LEFT TURN	W	MOTORCYCLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	55	GOING STRAIGHT
5/4/2018	1355	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	3	GOING STRAIGHT	E	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
3/18/2018	2140	INJ	ON	2	SNOWY	DARK-UNLIGHTED	SNOW/SLEET/HAIL	REAR-END	W	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	UNKNOWN	15	GOING STRAIGHT	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
3/8/2018	730	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	55	MAKING LEFT TURN	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	65	GOING STRAIGHT
12/30/2017	1230	INJ	ON	5	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	65	GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
3/9/2017	1625	INJ	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	15	MAKING LEFT TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	55	GOING STRAIGHT
8/1/2017	640	PDO	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	W	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	35	MAKING RIGHT TURN	N	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	15	GOING STRAIGHT
3/9/2017	1745	INJ	ON	2	DRY	DAWN OR DUSK	NONE	APPROACH TURN	NE	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER UNFAMILIAR WITH AREA	10	MAKING LEFT TURN	SW	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	70	GOING STRAIGHT
2/5/2017	2030	PDO	OFF AT TEE	1	DRY	DARK-UNLIGHTED	NONE	EMBANKMENT CUT/FILL SLOPE	N	SUV	NO IMPAIRMENT SUSPECTED	DRIVER UNFAMILIAR WITH AREA	35	GOING STRAIGHT			NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR		

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
General Summary of Crashes Report

12/08/2021

Job #: 20211208125823

Location: 94 A **Begin:** 0.99 **End:** 1.01 **From:** 01/01/2017 **To:** 12/31/2019

Severity

PDO:	8	
INJ:	6	10 :Injured
FAT:	1	1 :Killed
Total:	**15**	

Number of Vehicles

One Vehicle:	1
Two Vehicles:	13
Three or More:	1
Unknown:	0
Total:	**15**

Location

On Road:	15
Off Road:	0
Unknown:	0
Total:	**15**

Mainline/Ramps/Frontage Rds

Mainline:	15
Ramps:	0
Frontage/Ramp Intsx:	0
Frontage Roads:	0
HOV Lanes:	0
Unknown:	0
Total:	**15**

Lighting Conditions

Daylight:	11
Dawn or Dusk:	1
Dark - Lighted:	1
Dark - Unlighted:	2
Unknown:	0
Total:	**15**

Crash Rates

PDO:	33.46 *	* Per MVMT
INJ:	25.10 *	** Per 100 MVMT
FAT:	418.31 **	**Total:** 62.75 *

Crash Type

Overturning:	0
Other Non Collision:	0
Pedestrians:	0
Broadside:	3
Head On:	0
Rear End:	6
Sideswipe Same:	0
Sideswipe Opposite:	0
Approach Turn:	5
Overtaking Turn:	0
Parked Motor Vehicle:	0
Railway Vehicle:	0
Bicycles:	0
Domestic Animal:	1
Wild Animal:	0
Fixed Objects:	0
Other Objects:	0
Unknown:	0
Total:	**15**

Weather Conditions

None:	14
Rain:	0
Snow/Sleet/Hail:	0
Fog:	0
Dust:	0
Wind:	1
Unknown:	0
Total:	**15**

Road Conditions

Dry:	15
Wet:	0
Muddy:	0
Snowy:	0
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	0
Unknown:	0
Total:	**15**

Vehicle Types

	Vehicle 1	Vehicle 2	Vehicle 3
Passenger Car/Van:	6	6	0
Passenger Car/Van w/Trailer:	0	0	0
Pickup Truck/Utility Van:	3	3	1
Pickup Truck/Utility Van w/Trailer:	0	0	0
SUV:	5	3	0
SUV w/Trailer:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Busses > 15 People:	1	2	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	0	0	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	0	0	0
Other:	0	0	0
Unknown:	0	0	0
Total:	**15**	**14**	**1**

ADT: 10,396 **Length:** 0.02

SH-94 and Marksheffel Road (MP 1) Crash Data

date	time	severity	location	vehicles	condition	lighting	weather	acctype	dir_1	vehicle_1	driver_1	factor_1	speed_1	veh_move_1	dir_2	vehicle_2	driver_2	factor_2	speed_2	veh_move_2
12/2/2019	640	INJ	ON	2	DRY	DAWN OR DUSK	NONE	APPROACH TURN	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	20	MAKING LEFT TURN	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT
10/16/2019	950	INJ	ON	2	DRY	DAYLIGHT	NONE	REAR-END	S	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	55	GOING STRAIGHT	S	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
10/11/2019	1323	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	10	MAKING RIGHT TURN	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
8/13/2019	1700	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	30	SLOWING	W	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
7/9/2019	845	PDO	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	5	MAKING RIGHT TURN	N	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	45	GOING STRAIGHT
6/27/2019	720	PDO	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	S	SUV	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	15	MAKING LEFT TURN	N	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT
1/9/2019	555	PDO	ON	2	DRY	DARK-UNLIGHTED	NONE	REAR-END	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	DRIVER PREOCCUPIED	15	SLOWING	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC
9/14/2018	1545	INJ	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	15	MAKING LEFT TURN	N	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT
9/2/2018	1435	PDO	ON	2	DRY	DAYLIGHT	NONE	REAR-END	W	PASSENGER CAR/VAN	ALCOHOL INVOLVED	UNKNOWN	55	GOING STRAIGHT	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	35	GOING STRAIGHT
6/4/2018	1055	FAT	ON	2	DRY	DAYLIGHT	NONE	APPROACH TURN	W	TRUCK GVW > 10K/BUSSES > 15 PEOPLE	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	15	MAKING LEFT TURN	E	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	45	GOING STRAIGHT
4/2/2018	1435	INJ	ON	3	DRY	DAYLIGHT	NONE	BROADSIDE	W	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	UNKNOWN	65	GOING STRAIGHT	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	45	GOING STRAIGHT
12/28/2017	740	INJ	ON	2	DRY	DAYLIGHT	NONE	BROADSIDE	S	SUV	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT
11/30/2017	545	PDO	ON	2	DRY	DARK-LIGHTED	NONE	APPROACH TURN	S	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	20	MAKING LEFT TURN	N	PICKUP TRUCK/UTILITY VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	50	GOING STRAIGHT
1/9/2017	955	INJ	ON	2	DRY	DAYLIGHT	WIND	REAR-END	W	SUV	NO IMPAIRMENT SUSPECTED	UNKNOWN	15	GOING STRAIGHT	W	PASSENGER CAR/VAN	NO IMPAIRMENT SUSPECTED	NO APPARENT CONTRIBUTING FACTOR	0	STOPPED IN TRAFFIC

APPENDIX I

Conceptual Site Plans

US HIGHWAY 24

STATE HIGHWAY 94

AIR LANE

MARKSHEFFEL ROAD

PARCEL 216A

BUILDING 1
REAR LOAD
131,400 SF
730' X 180'
200 PARKING SPACES
@1.5/1000

BUILDING 2
REAR LOAD
126,000 SF
700' X 180'
240 PARKING SPACES
@1.9/1000

BUILDING 3
REAR LOAD
93,600 SF
520' X 180'
184 PARKING SPACES
@2.0/1000