MASTER TRAFFIC IMPACT STUDY

For

Flying Horse East
El Paso County, Colorado

December 2024

Prepared for:

Classic Homes
2138 Flying Horse Club Drive
Colorado Springs, Colorado

Prepared by:

SM ROCHA, LLC
TRAFFIC AND TRANSPORTATION CONSULTANTS

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Fred Lantz, PE

24-012099

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.

12/20/2024

Fred Lantz, P.E. #23410 Date

Developer's Statement

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

Drew Balsick Date
Classic Homes
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

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I. Introduction

Project Overview

This master traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Flying Horse East. This analysis was prepared in accordance with Appendix B – Transportation Impact Study Guidelines from the County's Engineering Criteria Manual (ECM)[1].

This proposed mixed-use development consists of single-family and multifamily housing, a charter school, business park, and general retail space. The development is located southeast of the Enoch Road and State Highway 94 intersection in El Paso County, Colorado.

Study Area Boundaries

The study area to be examined in this analysis referenced guidelines defined within Section 2.2(5)(b) of the Colorado Department of Transportation's (CDOT) State Highway Access Code (SHAC)[2] and encompasses the area bounded by State Highway 94 south to Bradley Road, and from State Highway 21 east to S Peyton Highway. Proposed site access drives were also included within this analysis.

Figure 1 illustrates location of the site and study intersections.

Site Description

Land for the development is currently vacant and surrounded by open space and residential land uses.

The proposed development is conceptual and no specific land uses have been determined. However, for purposes of this analysis, there is assumed to be construction for approximately 411 single-family detached dwelling units, 2,883 single-family attached dwelling units, 1,933 multifamily housing units, a K-12 charter school supporting a maximum of 500 students, an approximately 96,300 square foot business park, and 14,300 square feet of strip retail.

Proposed access to the development is provided at the following locations: two full-movement accesses onto State Highway 94 (referred to as Access A and Access B), and two full-movement accesses onto Enoch Street (referred to as Access C and Access D). Additional access drives are expected as land uses and densities within the sketch plan become defined over time. Therefore, due to the conceptual nature of the sketch plan, these access drives were excluded from analysis. At later stages of development, these access drives can be analyzed.

[1] El Paso County Engineering Criteria Manual, El Paso County, October 2020.
[2] State Highway Access Code, The Transportation Commission of Colorado, March 2002.

For purposes of this study, it is assumed that development construction would be completed by end of Year 2030.

General site and access locations are shown on Figure 1.

A sketch plan, as prepared by HR Green, Inc., is shown on Figure 2. This plan is provided for illustrative purposes only.

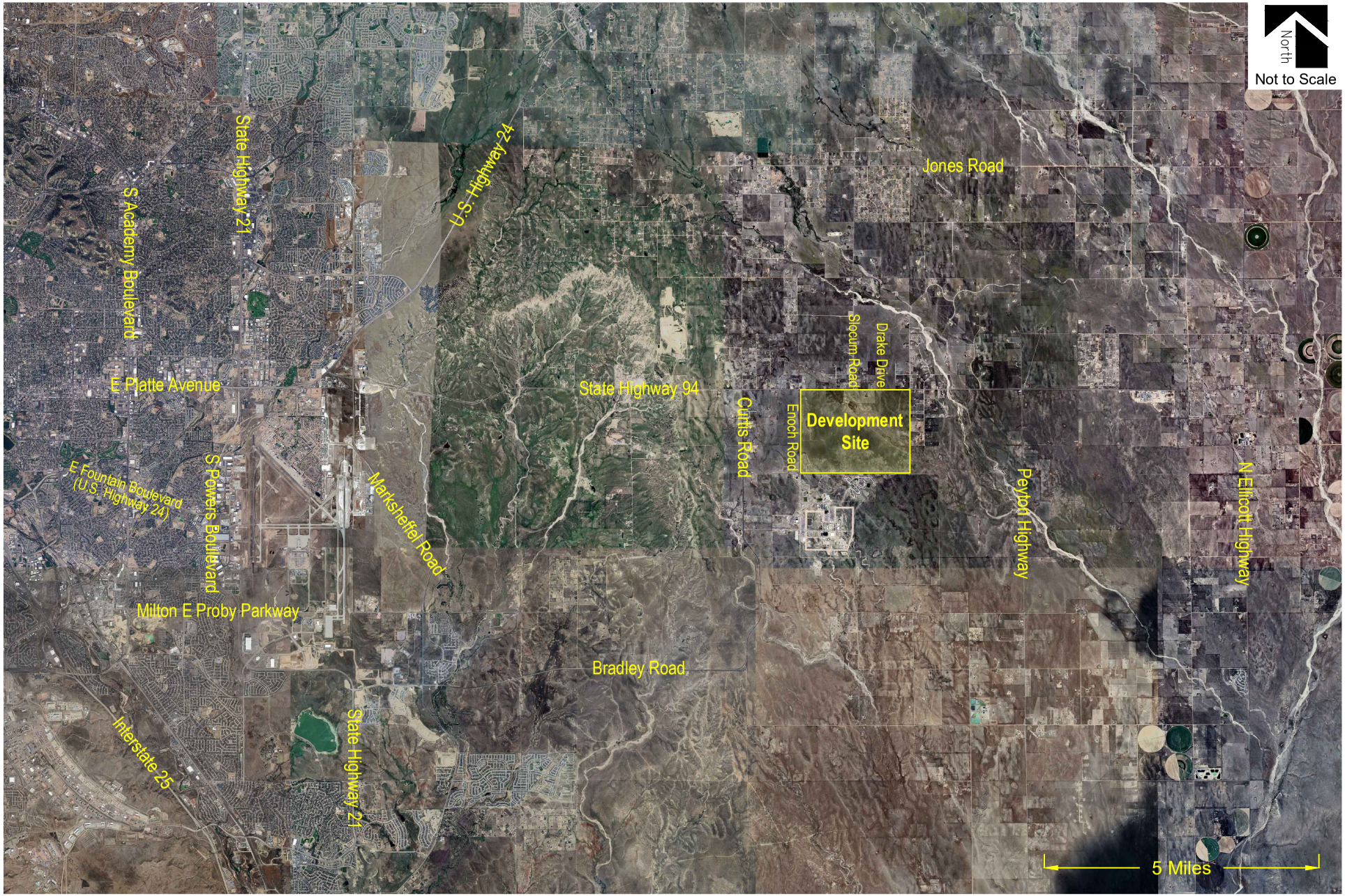


Figure 1
SITE LOCATION

Figure 2
SKETCH PLAN

Existing and Committed Surface Transportation Network

Within the study area, State Highway 94 is the primary roadway that will accommodate traffic to and from the proposed development. The secondary roadways include U.S. Highway 24, S Powers Boulevard (State Highway 21), S Peyton Highway, Marksheffel Road, Milton E Proby Parkway, Bradley Road, S Curtis Road, Enoch Road, Slocum Road, Drake Drive. A brief description of each roadway, based on the City's Major Thoroughfare Plan (MTP)[3] and the County's Major Transportation Corridors Plan (MTCP)[4], is provided below:

State Highway 94 is an east-west state roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersections within the study area. The Colorado Department of Transportation (CDOT) categorizes the adjacent segment of State Highway 94 as an Expressway, Major Bypass (E-X) west of Corral Valley Road and a Non-Rural Principal Highway (NR-A) east of Corral Valley Road. State Highway 94 and provides posted speed limits ranging from 40 to 65 MPH.

S Powers Boulevard is a north-south state roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersections within the study area. CDOT categorizes the adjacent segment of S Powers Boulevard (State Highway 21) as an Interstate System, Freeway Facility (F-W) and provides posted speed limits ranging from 60 to 65 MPH within the study area.

U.S. Highway 24 is a northeast-southwest state roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. CDOT categorizes the adjacent segment of U.S. Highway 24 as an Expressway, Major Bypass (E-X) and provides a posted speed limit of 65 MPH.

Marksheffel Road is a north-south principal arterial roadway supporting a five-lane cross-section (two lanes in each direction with a center two-way left-turn lane) with exclusive turn lanes at the intersection within the study area. Marksheffel Road provides a posted speed limit of 55 MPH.

Milton E Proby Parkway is an east-west expressway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. Milton E Proby Parkway provides a posted speed limit of 55 MPH.

Bradley Road is an east-west principal arterial roadway from S Powers Boulevard east to Marksheffel Road and a minor arterial roadway east of Marksheffel Road. Bradley Road has four through lanes (two lanes in each direction) west of Marksheffel Road and two through lanes (one lane in each direction) east of Marksheffel Road. Bradley Road has exclusive turn lanes at the intersection within the study area and provides a posted speed limit of 50 MPH. Bradley Road ends at the Curtis Road intersection and continues north as Curtis Road.

[3] City of Colorado Springs Major Thoroughfare Plan, City of Colorado Springs, Department of Public Works, June 2, 2022.

[4] El Paso County Major Transportation Corridors Plan, Felsburg Holt & Ullevig, July 2024.

Curtis Road is a north-south minor arterial roadway having two through lanes (one lane in each direction) with exclusive turn lanes at the intersection within the study area. Curtis Road provides a posted speed limit of 55 MPH. Curtis Road ends at its intersection approximately five miles south of State Highway 94.

Enoch Road is a north-south major collector roadway having two through lanes (one lane in each direction) with a combination of shared and exclusive turn lanes at the intersection within the study area. Enoch Road provides a posted speed limit of 55 MPH.

Slocum Road is a north-south rural local roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Slocum Road provides a posted speed limit of 45 MPH.

Drake Drive is a north-south, gravel, rural local roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Drake Drive has an assumed posted speed limit of 45 MPH.

S Peyton Highway is a north-south major collector roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. S Peyton Highway provides a posted speed limit of 55 MPH.

The study intersections of State Highway 94 with S Peyton Highway and Slocum Road operate under a stop-controlled condition. A stop-controlled intersection is defined as a roadway intersection where vehicle rights-of-way are controlled by one or more "STOP" signs. All other study intersections operate under traffic signal control.

In review of PPACG's 2045 Long Range Transportation Plan[5], it is suggested that long-range transportation plans are currently being evaluated for the State Highway 94 corridor, S Powers Boulevard, U.S. Highway 24 west of State Highway 94, Curtis Road north of State Highway 94, and for a potential extension of Bradley Road west of S Powers Boulevard. Additionally, the 2045 Long Range Transportation Plan envisions Enoch Road as a 4-lane roadway.

In further review of PPACG's 2045 Long Range Transportation Plan and in conjunction with six regional governments including the Pikes Peak Rural Transportation Authority (PPRTA), CDOT, El Paso County, and City of Colorado Springs, it is understood that PPACG's Metropolitan Planning Organization (MPO) is in the process of seeking funds through their Transportation Improvement Program (TIP) to implement the long-term plans being evaluated for the study area roadways. It is therefore unknown at this time what improvements are being planned for and their timelines (i.e., roadway upgrades, roadway widenings, intersection control improvements, etc.).

[5] Moving Forward 2045: Pikes Peak Area Regional Transportation Plan, Pikes Peak Area Council of Governments, January 2020.

II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the intersections of State Highway 94 with U.S. Highway 24, Marksheffel Road, Curtis Road, Enoch Road, Slocum Road, and S Peyton Highway, as well as the S Powers Boulevard intersections with Bradley Road and Milton E Proby Parkway. Average daily traffic (ADT) volumes were collected over a 24-hour period on State Highway 94 and Enoch Road. Counts were collected on Thursday, December 5, 2024, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 4:00 p.m. to 6:00 p.m.

Peak hour traffic counts shown for the State Highway 94 and Drake Road intersection were estimated using standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11th Edition. ITE land use code 210 (Single-Family Detached Housing) was used for estimating trip generation because of its best fit to the existing land use. Estimated trip generation for the existing land uses is provided for reference in Appendix F.

The study area intersections and ADT volumes are shown on Figure 3. Newly collected intersection counts and intersection geometry are shown in Figure 4. Traffic count data is included for reference in Appendix A.

Existing signal timing parameters for the signalized intersections within the study area were assumed based on the existing signal head configuration and allowable movements, and pursuant to typical signal timing data described within the City's Traffic Criteria Manual[6] and CDOT's SHAC. Timings were used throughout this study to the best extent possible in order to remain consistent with typical City and County signal coordination plans.

[6] Engineering Criteria Manual, Section III: Traffic Criteria Manual, City of Colorado Springs City Engineering, July 2010.

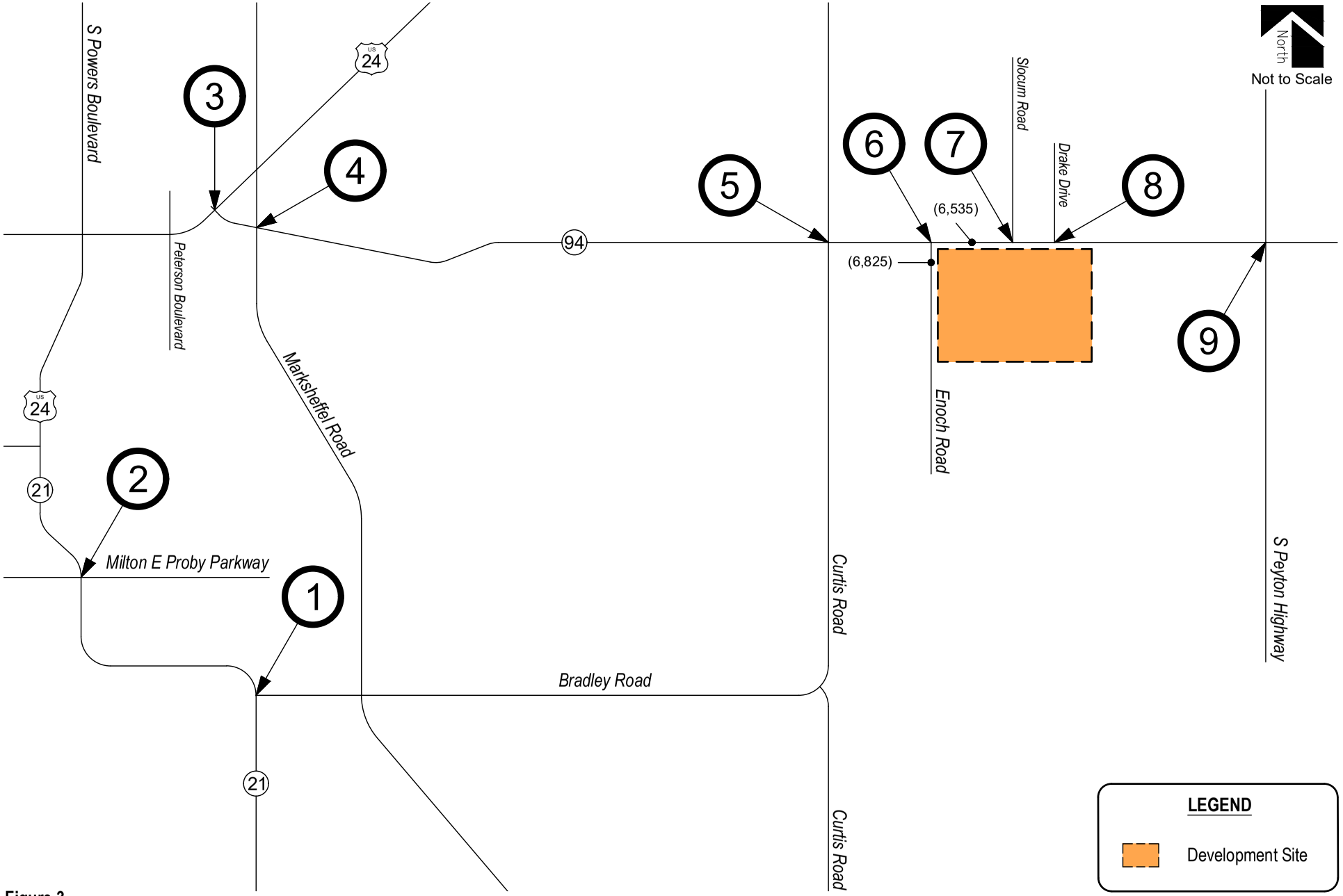


Figure 3
EXISTING TRAFFIC
Volumes
(ADT) : Average Daily Traffic

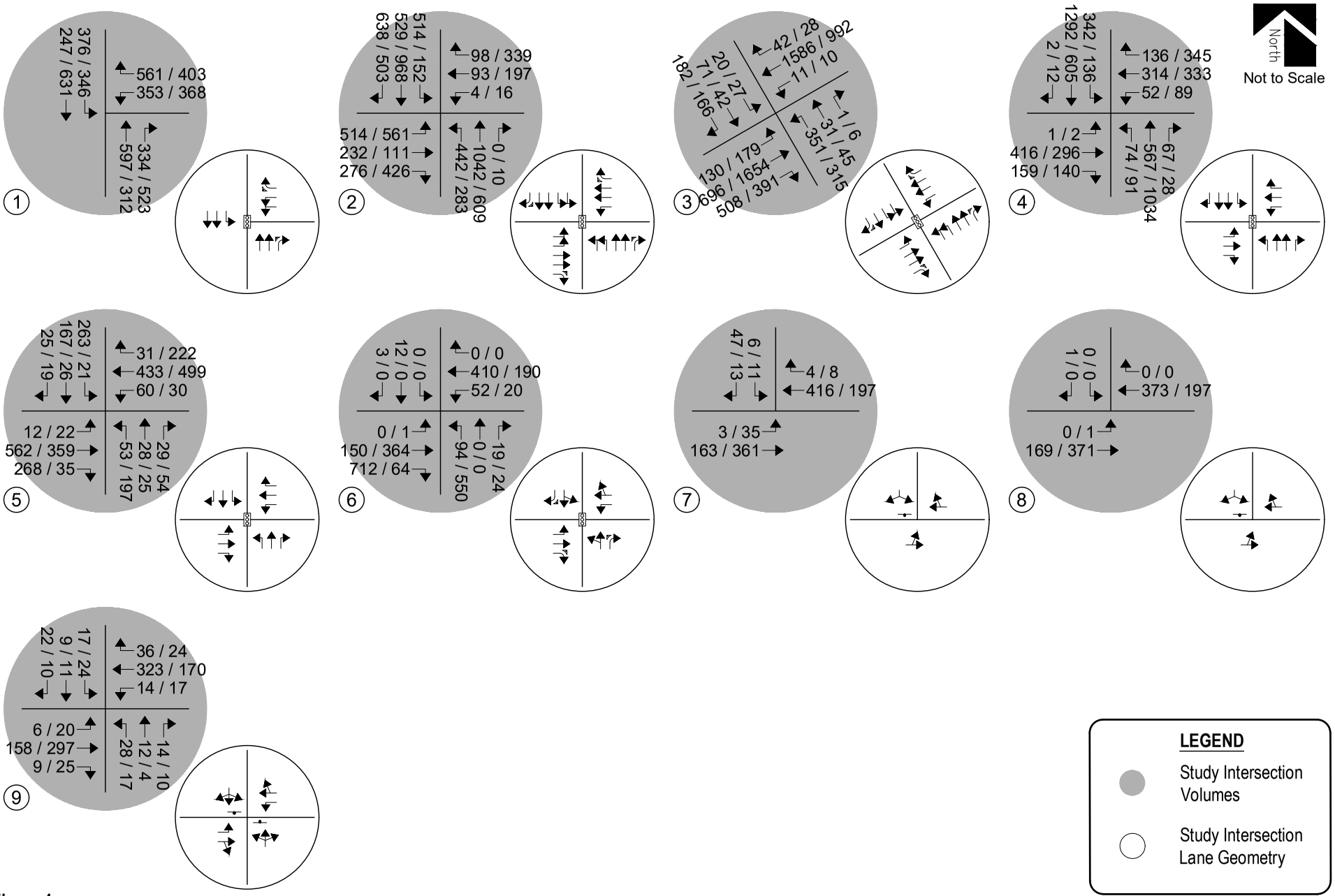


Figure 4
EXISTING TRAFFIC
Volumes & Intersection Geometry
AM / PM Peak Hour

Peak Hour Intersection Levels of Service – Existing Traffic

The Signalized and Unsignalized Intersection Analysis techniques, as published in the Highway Capacity Manual (HCM), 7th Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, were used to analyze the study intersections for existing and future traffic conditions. These nationally accepted techniques allow for the determination of intersection level of service (LOS) based on the congestion and delay of each traffic movement.

Pursuant to Section B.4.1.A of the County's ECM, the design objective for each scenario of this study shall be level of service "D". Level of service is a method of measurement used by transportation professionals to quantify a driver's perception of travel conditions that include travel time, number of stops, and total amount of stopped delay experienced on a roadway network. The HCM categorizes level of service into a range from "A" which indicates little, if any, vehicle delay, to "F" which indicates a level of operation considered unacceptable to most drivers. These levels of service grades with brief descriptions of the operating condition, for unsignalized and signalized intersections, are included for reference in Appendix B and have been used throughout this study.

The level of service analyses results for existing conditions are summarized in Table 1.

Intersection capacity worksheets developed for this study are provided in Appendix C.

Table 1 – Intersection Capacity Analysis Summary – Existing Traffic

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	B (14.3)	B (12.2)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	D (37.4)	C (31.2)
3) U.S. Highway 24 / State Highway 94 (Signalized)	C (34.3)	C (25.5)
4) State Highway 94 / Marksheffel Road (Signalized)	C (29.8)	C (29.1)
5) State Highway 94 / Curtis Road (Signalized)	C (24.7)	B (17.3)
6) State Highway 94 / Enoch Road (Signalized)	A (4.7)	D (36.3)
7) State Highway 94 / Slocum Road (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A B	 A B
8) State Highway 94 / Drake Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A B	 A A
9) State Highway 94 / S Peyton Highway (Stop-Controlled) Eastbound Left Westbound Left Northbound Left, Through and Right Southbound Left, Through and Right	 A A B B	 A A B B

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Existing Traffic Analysis Results

Under existing conditions, operational analysis shows that the signalized intersection of S Powers Boulevard with Bradley Road has overall operations at LOS B during the morning and afternoon peak traffic hours.

The signalized intersection of S Powers Boulevard with Milton E Proby Parkway has overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road have overall operations at LOS C during the morning and afternoon peak traffic hours.

The signalized intersection of State Highway 94 with Curtis Road has overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of State Highway 94 with Enoch Road has overall operations at LOS A during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The stop-controlled intersections along State Highway 94 have turn movement operations at or better than LOS B during both peak traffic hours.

III. Future Traffic Conditions Without Proposed Development

Background traffic is the traffic projected to be on area roadways without consideration of the proposed development. Background traffic includes traffic generated by development of vacant parcels in the area.

To account for projected increases in background traffic for Years 2030 and 2045, a compounded annual growth rate was determined using historical traffic data for the surrounding area provided by CDOT's Online Transportation Information System (OTIS) along the adjacent segment of State Highway 94, which anticipates a 20-year growth rate between one and two percent. Therefore, in order to provide for a conservative analysis, a growth rate of two percent was applied to existing traffic volumes. This annual growth rate is also consistent with regional growth projections and the level of in-fill development expected within the area.

To account for projected traffic from adjacent developments not yet built, trip generations from the Colorado Centre Addition No. 3 Annexation[7] traffic study were added to background traffic volumes.

Year 2030 and Year 2045 background traffic conditions assume no roadway improvements to accommodate regional transportation demands. This assumption provides for a conservative analysis. Year 2045 assumes existing signal timing parameters for the signalized study intersections with optimized intersection splits in effort to better long-term intersection performance.

The study area intersections and projected short-term background ADT volumes are shown on Figure 5. Projected background intersection traffic volumes and intersection geometry for Year 2030 are shown in Figure 6.

The study area intersections and projected long-term background ADT volumes are shown in Figure 7. Projected background intersection traffic volumes and intersection geometry for Year 2045 are shown in Figure 8.

[7] Colorado Centre Addition No. 3 Annexation: Traffic Impact Study, Kimley-Horn and Associates, Inc., January 2024.

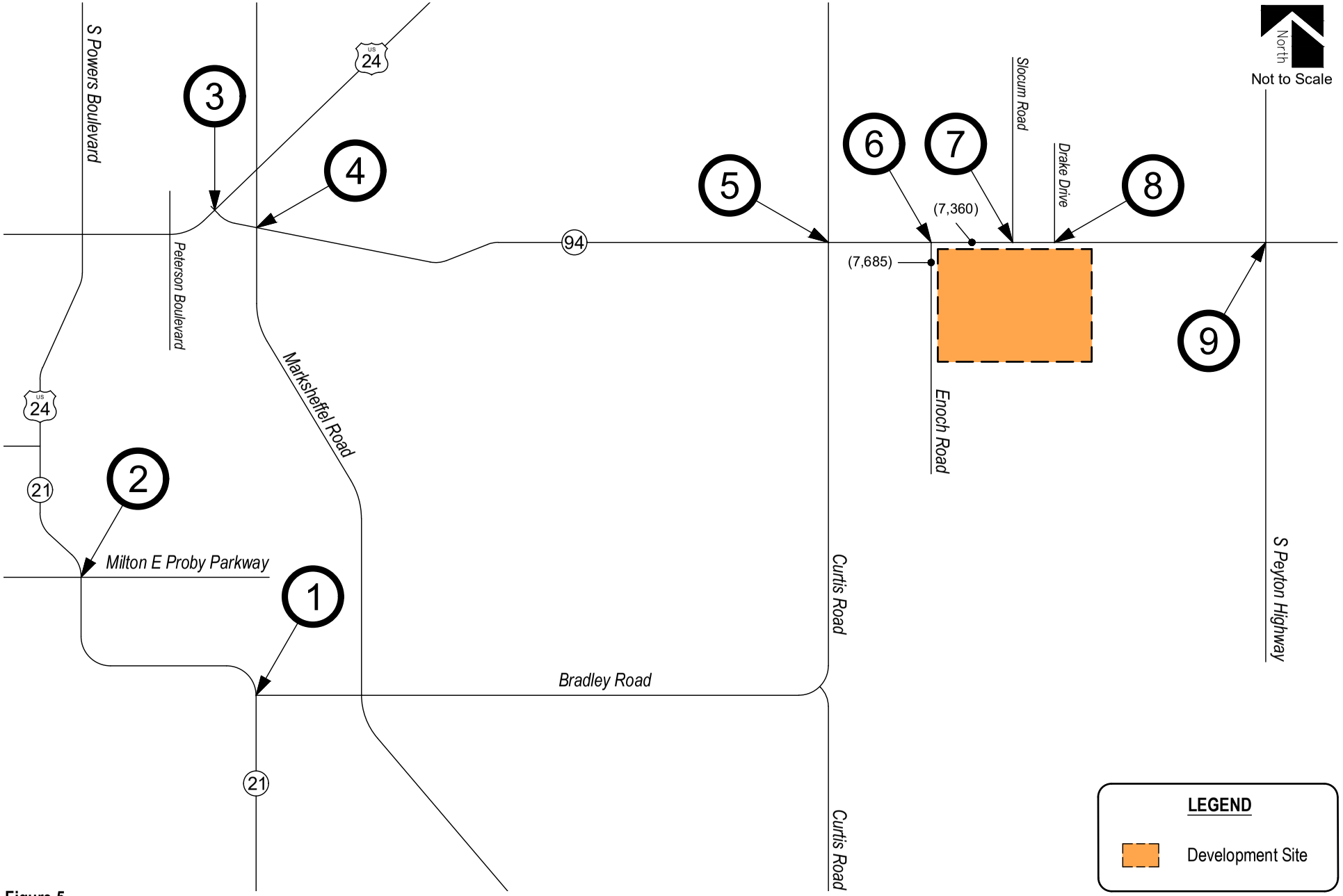


Figure 5
BACKGROUND TRAFFIC - YEAR 2030
Volumes
(ADT) : Average Daily Traffic

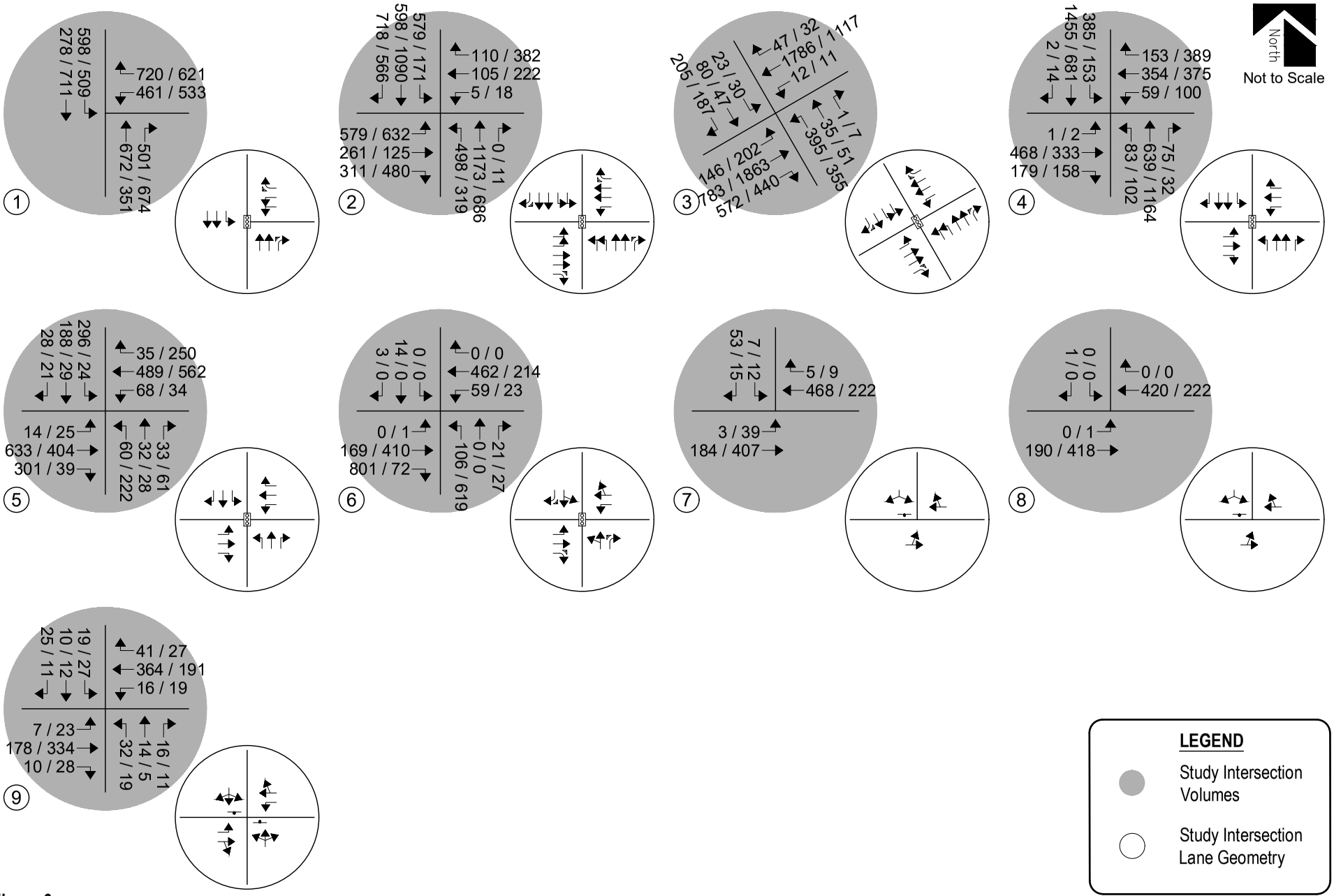


Figure 6
BACKGROUND TRAFFIC - YEAR 2030
Volumes & Intersection Geometry
AM / PM Peak Hour

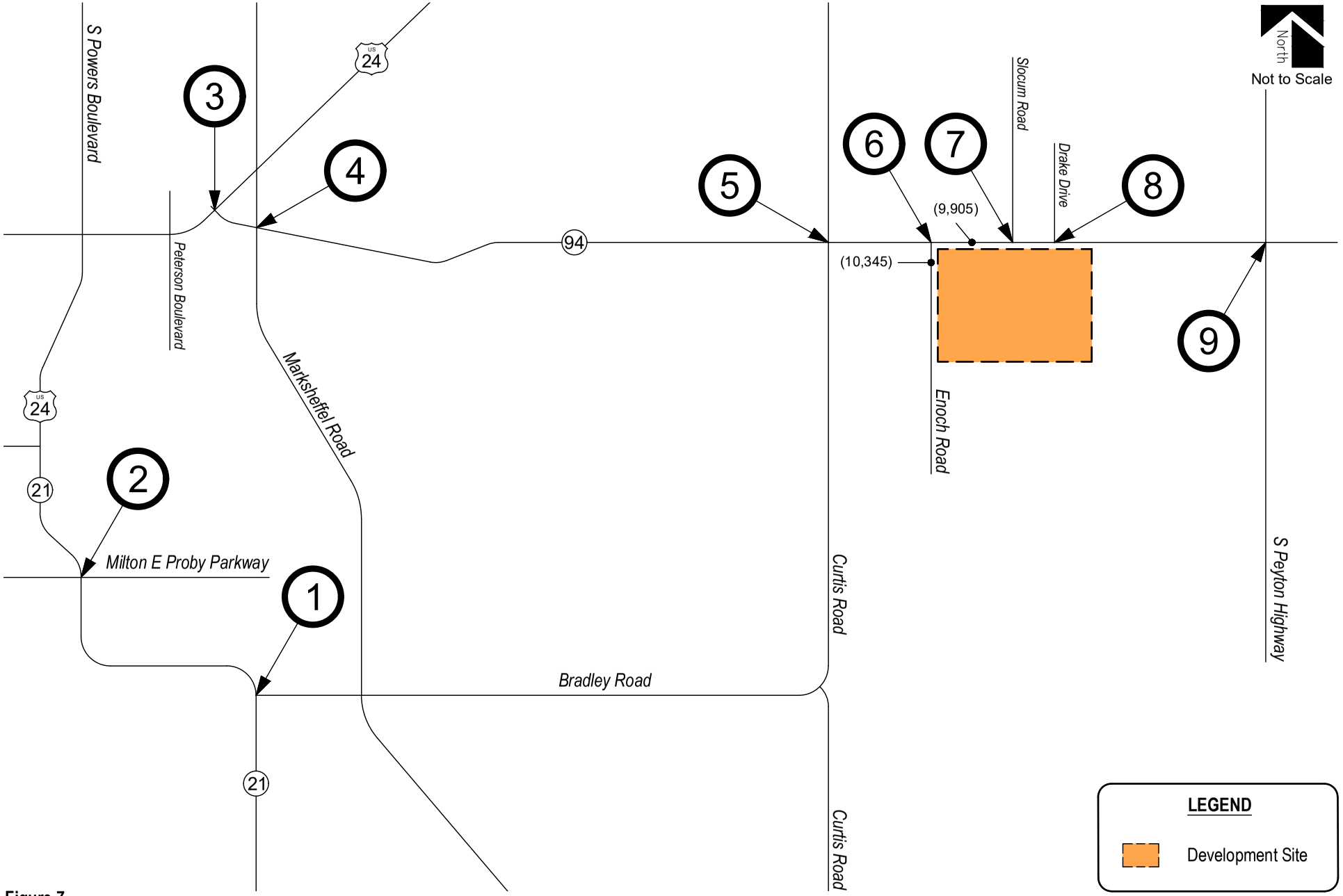


Figure 7
BACKGROUND TRAFFIC - YEAR 2045
Volumes
(ADT) : Average Daily Traffic

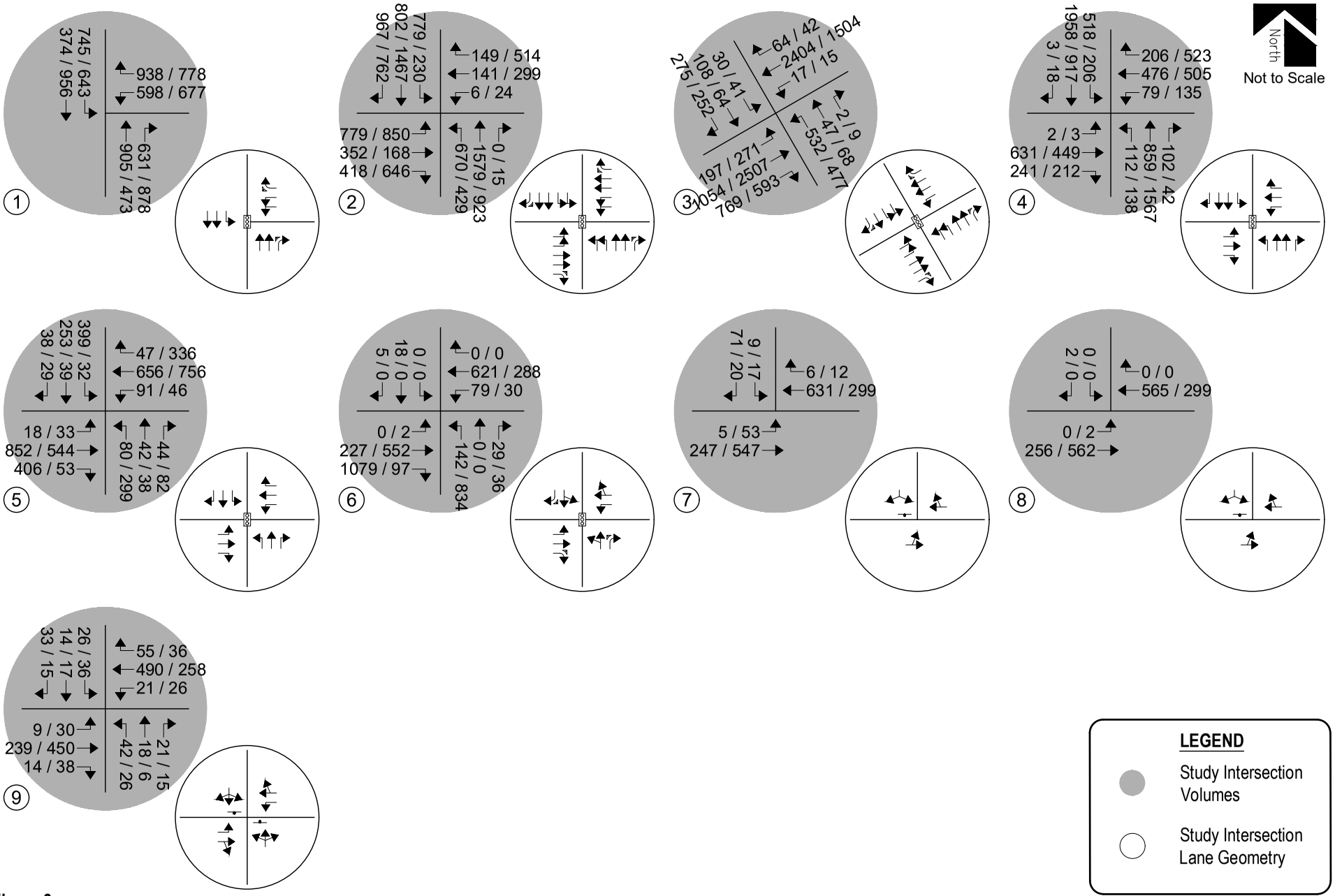


Figure 8
BACKGROUND TRAFFIC - YEAR 2045
Volumes & Intersection Geometry
AM / PM Peak Hour

Peak Hour Intersection Levels of Service – Background Traffic

As with existing traffic conditions, the operations of study intersections were analyzed under background conditions, without the proposed development, using the SYNCHRO computer program.

Background traffic level of service analysis results for Year 2030 are listed in Table 2. Year 2045 operational results are summarized in Table 3.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 2 – Intersection Capacity Analysis Summary – Background Traffic – Year 2030

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	C (23.5)	B (15.3)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	D (44.0)	C (35.0)
3) U.S. Highway 24 / State Highway 94 (Signalized)	D (46.2)	C (29.8)
4) State Highway 94 / Marksheffel Road (Signalized)	D (37.3)	C (32.9)
5) State Highway 94 / Curtis Road (Signalized)	C (26.6)	B (18.9)
6) State Highway 94 / Enoch Road (Signalized)	A (5.1)	D (40.0)
7) State Highway 94 / Slocum Road (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A B	 A B
8) State Highway 94 / Drake Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A B	 A A
9) State Highway 94 / S Peyton Highway (Stop-Controlled) Eastbound Left Westbound Left Northbound Left, Through and Right Southbound Left, Through and Right	 A A C B	 A A B B

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Background Traffic Analysis Results – Year 2030

Year 2030 background traffic analysis indicates that the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of S Powers Boulevard with Milton E Proby Parkway expects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road predict overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersection of State Highway 94 with Curtis Road project overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of State Highway 94 with Enoch Road expects overall operations at LOS A during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The stop-controlled intersections along State Highway 94 project turn movement operations at or better than LOS B during both peak traffic hours.

Table 3 – Intersection Capacity Analysis Summary – Background Traffic – Year 2045

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	D (45.5)	C (21.8)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	F (80.7)	E (74.2)
3) U.S. Highway 24 / State Highway 94 (Signalized)	F (102.7)	E (76.5)
4) State Highway 94 / Marksheffel Road (Signalized)	F (110.9)	E (61.3)
5) State Highway 94 / Curtis Road (Signalized)	D (43.5)	C (23.4)
6) State Highway 94 / Enoch Road (Signalized)	A (6.8)	E (75.0)
7) State Highway 94 / Slocum Road (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A C	 A C
8) State Highway 94 / Drake Drive (Stop-Controlled) Eastbound Left and Through Southbound Left and Right	 A B	 A A
9) State Highway 94 / S Peyton Highway (Stop-Controlled) Eastbound Left Westbound Left Northbound Left, Through and Right Southbound Left, Through and Right	 A A C C	 A A C C

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Background Traffic Analysis Results – Year 2045

By Year 2045 and without the proposed development, the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersection of S Powers Boulevard with Milton E Proby Parkway expects overall operations at LOS F during the morning peak traffic hour and LOS E during the afternoon peak traffic hour.

The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road predict overall operations at LOS F during the morning peak traffic hour and LOS E during the afternoon peak traffic hour.

The signalized intersection of State Highway 94 with Curtis Road projects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersection of State Highway 94 with Enoch Road expects overall operations at LOS A during the morning peak traffic hour and LOS E during the afternoon peak traffic hour.

The stop-controlled intersections along State Highway 94 project turn movement operations at or better than LOS C during both peak traffic hours.

IV. Proposed Project Traffic

Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11th Edition, were applied to the proposed land uses in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from a point of origin to a point of destination.

The ITE land use codes 210 (Single-Family Detached Housing), 215 (Single-Family Attached Housing), 220 (Multifamily Housing (Low-Rise)), 538 (Charter School (K-12)), 770 (Business Park), and 822 (Strip Retail Plaza (<40k)) were used for estimating trip generation because of their conservative rates and best fit to the proposed land use descriptions.

As actual land uses, densities, or site plans within the Flying Horse East development become defined over time, it is expected that traffic generation characteristics considered within this study will need to be updated by more specific traffic analyses or studies to help assess if transportation improvements are needed to mitigate potential traffic impacts.

Trip generation rates used in this study are presented in Table 4.

Table 4 – Trip Generation Rates

ITE			TRIP GENERATION RATES						
			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94
215	Single-Family Attached Housing	DU	7.20	0.15	0.33	0.48	0.32	0.25	0.57
220	Multifamily Housing (Low-Rise)	DU	6.74	0.10	0.30	0.40	0.32	0.19	0.51
538	Charter School (K-12)	STU	2.55	0.42	0.41	0.83	0.37 *	0.37 *	0.73 *
770	Business Park	KSF	12.44	1.15	0.20	1.35	0.32	0.90	1.22
822	Strip Retail Plaza (<40K)	KSF	54.45	1.42	0.94	2.36	3.30	3.30	6.59

Key: DU = Dwelling Units. STU = Students. KSF = Thousand Square Feet Gross Floor Area.
* = Peak Hour of Generator rates.
Note: All data and calculations above are subject to being rounded to nearest value.

Table 5 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out.

Table 5 – Trip Generation Summary

ITE CODE	LAND USE	SIZE		TOTAL TRIPS GENERATED						
				24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
					ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	410	DU	3,866	75	212	287	243	143	385
215	Single-Family Attached Housing	3,285	DU	23,652	489	1,088	1,577	1,067	805	1,872
220	Multifamily Housing (Low-Rise)	1,142	DU	7,697	110	347	457	367	215	582
538	Charter School (K-12)	500	STU	1,275	212	203	415	183	183	365
770	Business Park	96.0	KSF	1,171	110	19	130	30	87	117
822	Strip Retail Plaza (<40K)	14.3	KSF	941	20	13	34	47	47	94
			Total:	*38,602*	*1,015*	*1,884*	*2,899*	*1,937*	*1,479*	*3,416*

Key: DU = Dwelling Units. STU = Students. KSF = Thousand Square Feet Gross Floor Area.
Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out, Table 5 illustrates that the proposed development has the potential to generate approximately 38,602 daily vehicle trips with 2,899 of those occurring during the morning peak hour and 3,416 during the afternoon peak hour.

Adjustments to Trip Generation Rates

It is considered likely that a mixed-use development of this type will attract trips from within area land uses. Use of ITE's estimation tool[8] for determining internal capture for mixed-use developments, created from research obtained by the National Cooperative Highway Research Program (NCHRP), was considered. However, due to the conceptual nature of the land uses and densities analyzed throughout this study, 2 percent and 8 percent internal capture rates were applied to AM and PM peak our trips, respectively, pursuant to guidelines defined within Section 2.2(4)(b) of CDOT's SHAC.

Table 6 illustrates projected ADT, AM Peak Hour, and PM Peak Hour traffic volumes likely generated by the proposed development upon build-out with reductions applied due to internal capture.

[8] NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, National Cooperative Highway Research Program, October 2010.

Table 6 – Trip Generation Summary with Reductions

ITE CODE	LAND USE	SIZE		TOTAL NEW TRIPS GENERATED						
				24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
					ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	410	DU	3,866	75	212	287	243	143	385
215	Single-Family Attached Housing	3,285	DU	23,652	489	1,088	1,577	1,067	805	1,872
220	Multifamily Housing (Low-Rise)	1,142	DU	7,697	110	347	457	367	215	582
538	Charter School (K-12)	500	STU	1,275	212	203	415	183	183	365
770	Business Park	96.0	KSF	1,171	110	19	130	30	87	117
822	Strip Retail Plaza (<40K)	14.3	KSF	941	20	13	34	47	47	94
	Internal Capture Trip Reduction:			*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
	Reduced Total:			*36,672*	*995*	*1,846*	*2,841*	*1,782*	*1,361*	*3,143*

Key: DU = Dwelling Units. KSF = Thousand Square Feet Gross Floor Area. RMS = Rooms. STU = Students.
Note: All data and calculations above are subject to being rounded to nearest value.

Upon build-out and with consideration for internal capture trip reductions, Table 6 illustrates that the proposed development has the potential to generate approximately 36,672 daily trips with 2,841 of those occurring during the morning peak hour and 3,143 during the afternoon peak hour.

Trip Distribution

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, available roadway network, and in reference to historical traffic count data provided by CDOT's Traffic Count Database System (TCDS)[9].

Overall trip distribution patterns for the development are shown on Figure 6.

Trip Assignment

Traffic assignment is how generated and distributed vehicle trips are expected to be loaded onto the available roadway network.

Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 6.

[9] Transportation Data Management System, MS2, 2022.

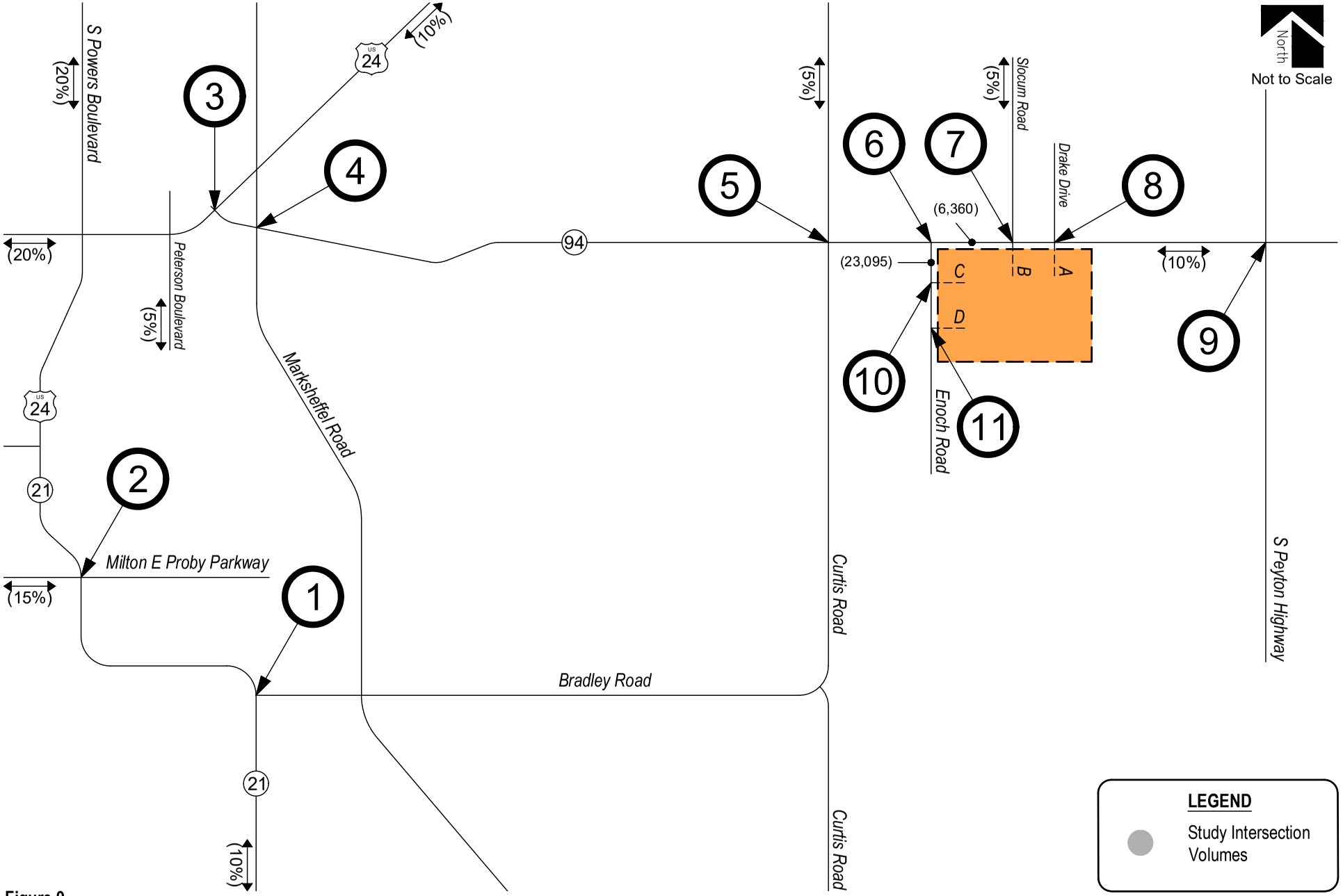


Figure 9
SITE DEVELOPMENT DISTRIBUTION & ASSIGNMENT
(%) : Overall
(ADT) : Average Daily Traffic

V. Future Traffic Conditions With Proposed Developments

Total traffic is the traffic projected to be on area roadways with consideration of the proposed development. Total traffic includes background traffic projections for Years 2030 and 2045 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2030.

Pursuant to area roadway improvement discussions provided in Section III, Year 2030 and Year 2045 total traffic conditions assume no roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

The study area intersections and projected short-term total ADT volumes are shown in Figure 10. Projected Year 2030 total intersection traffic volumes and geometry are shown in Figure 11.

The study area intersections and projected long-term total ADT volumes are shown in Figure 12. Figure 13 shows projected total intersection traffic volumes and geometry for Year 2045.

Total Traffic Signal Warrants

A signal warrant analysis, using Year 2030 total traffic volumes, was conducted for the State Highway 94 intersections with Slocum Road and Drake Drive in order to review potential for traffic signal control. Analysis results conclude that both intersections were found to be above the minimum vehicle volumes required to meet Warrant 3 – Peak Hour, from the Manual on Uniform Traffic Control Devices (MUTCD)[10], for the installation of a traffic signal. As such, the State Highway 94 intersections with Slocum Road and Drake Drive were analyzed under traffic signal control. Warrant study worksheets are provided for reference in Appendix E.

It is noted that signalization of these intersections is consistent with future potential intersection control as discussed within the State Highway 94 Access Management Plan[11]. Said intersections should be monitored further by CDOT and County Staff as area development occurs to determine when or if signalization installation is appropriate.

[10] Manual on Uniform Traffic Control Devices, 2009 Edition, Federal Highway Administration, May 2012.
[11] State Highway 94 Access Management Plan, El Paso County, December 2012.

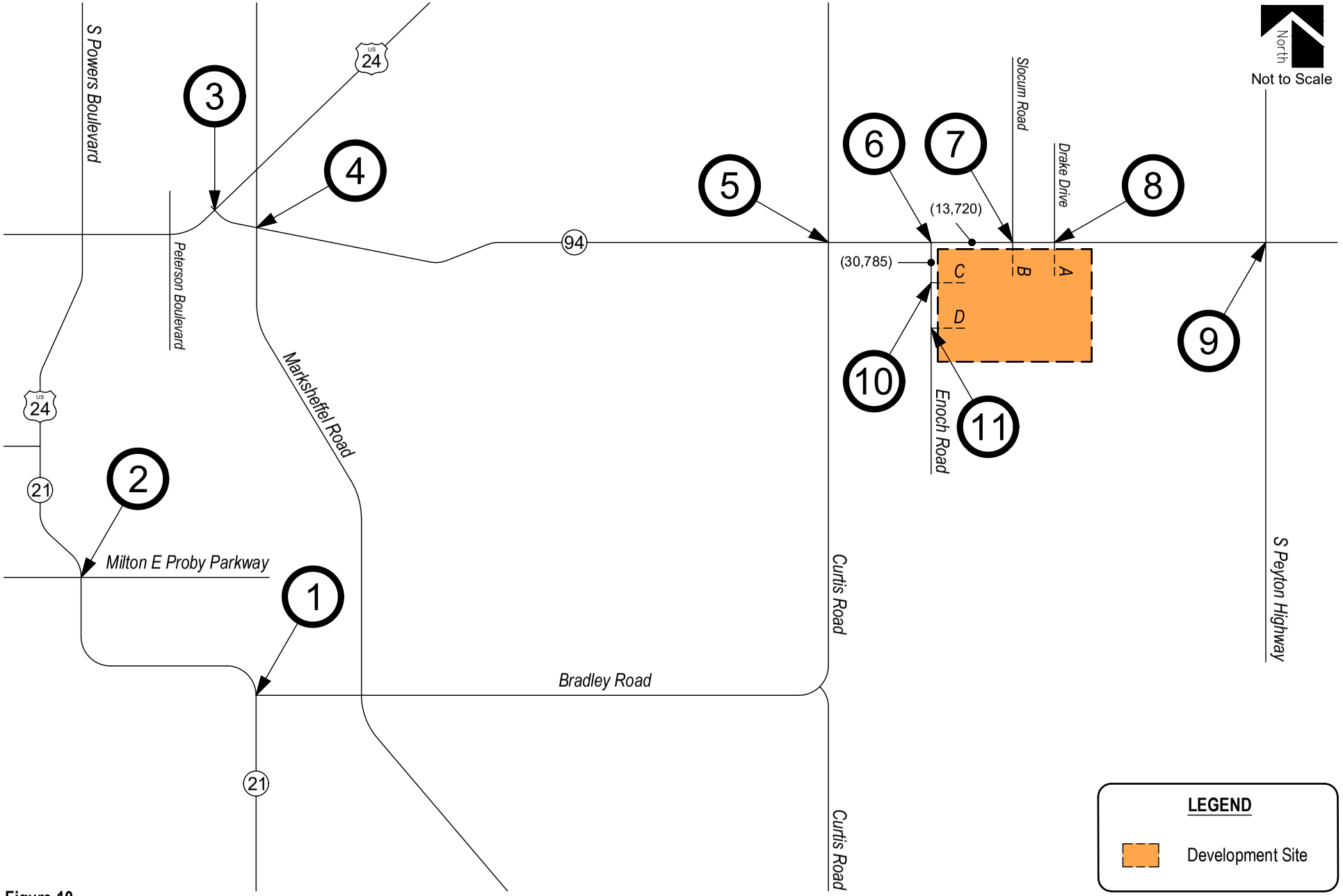


Figure 10
TOTAL TRAFFIC - YEAR 2030
Volumes
(ADT) : Average Daily Traffic

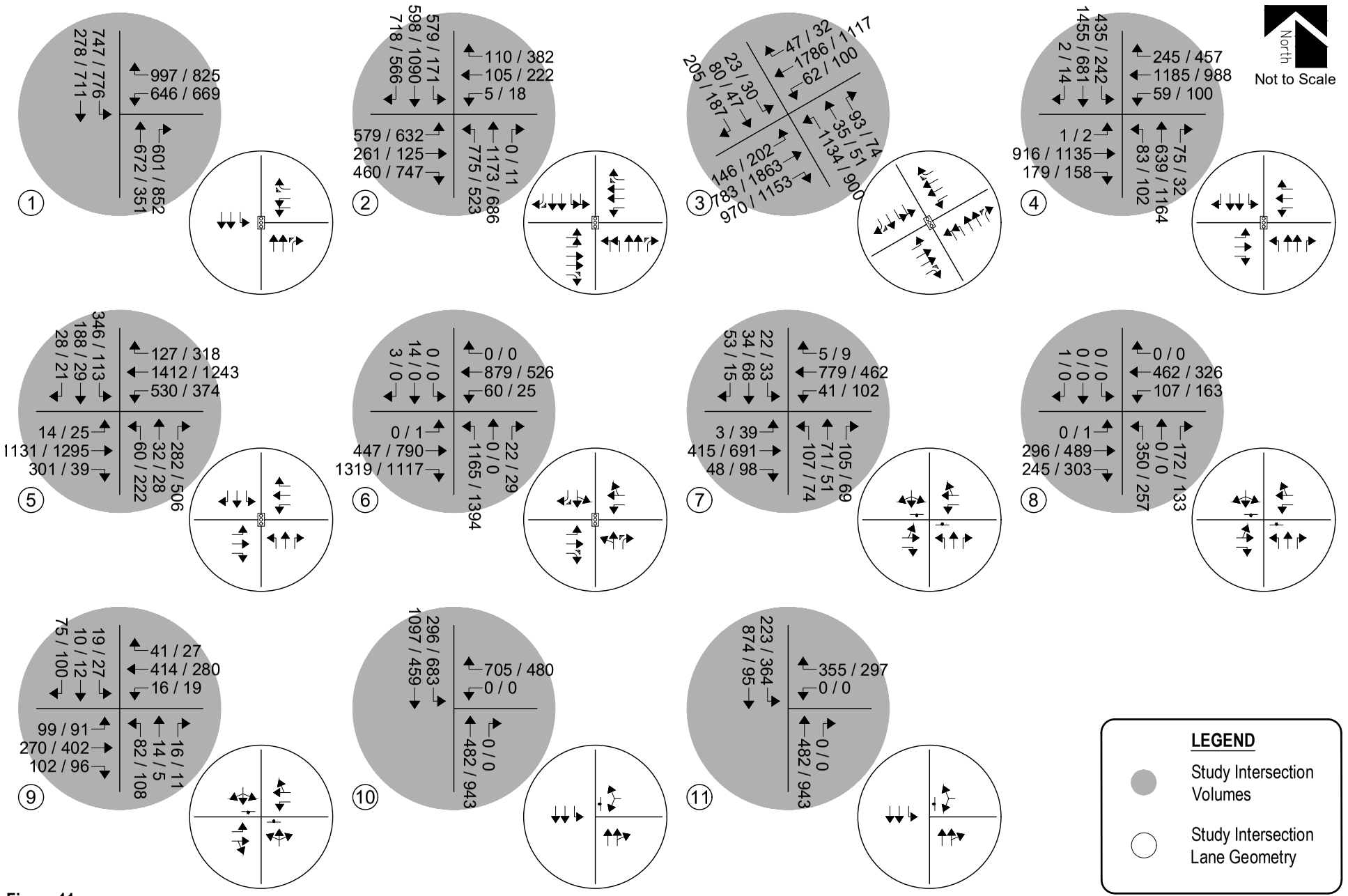


Figure 11
TOTAL TRAFFIC - YEAR 2030
Volumes & Intersection Geometry
AM / PM Peak Hour

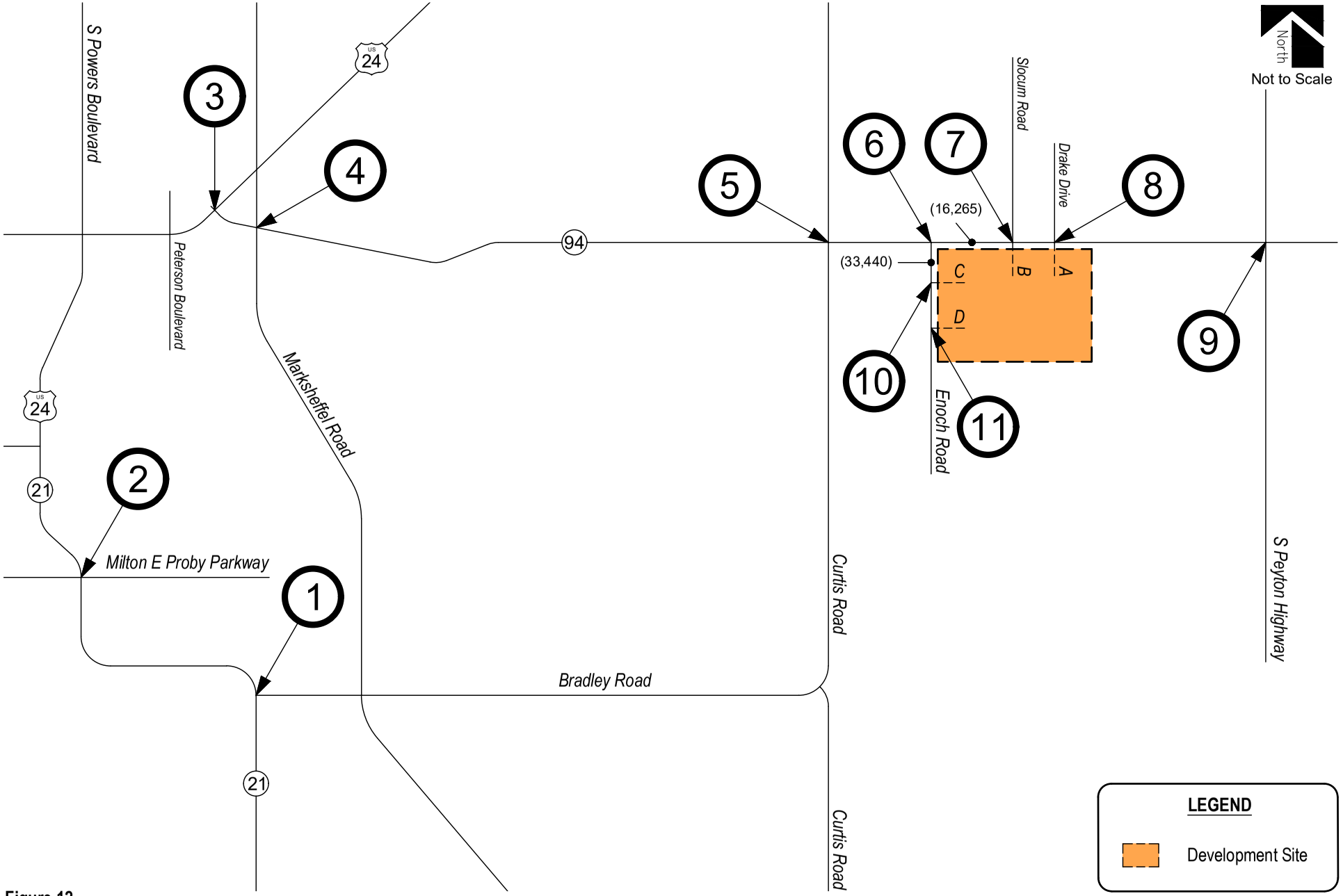


Figure 12
TOTAL TRAFFIC - YEAR 2045
Volumes
(ADT) : Average Daily Traffic

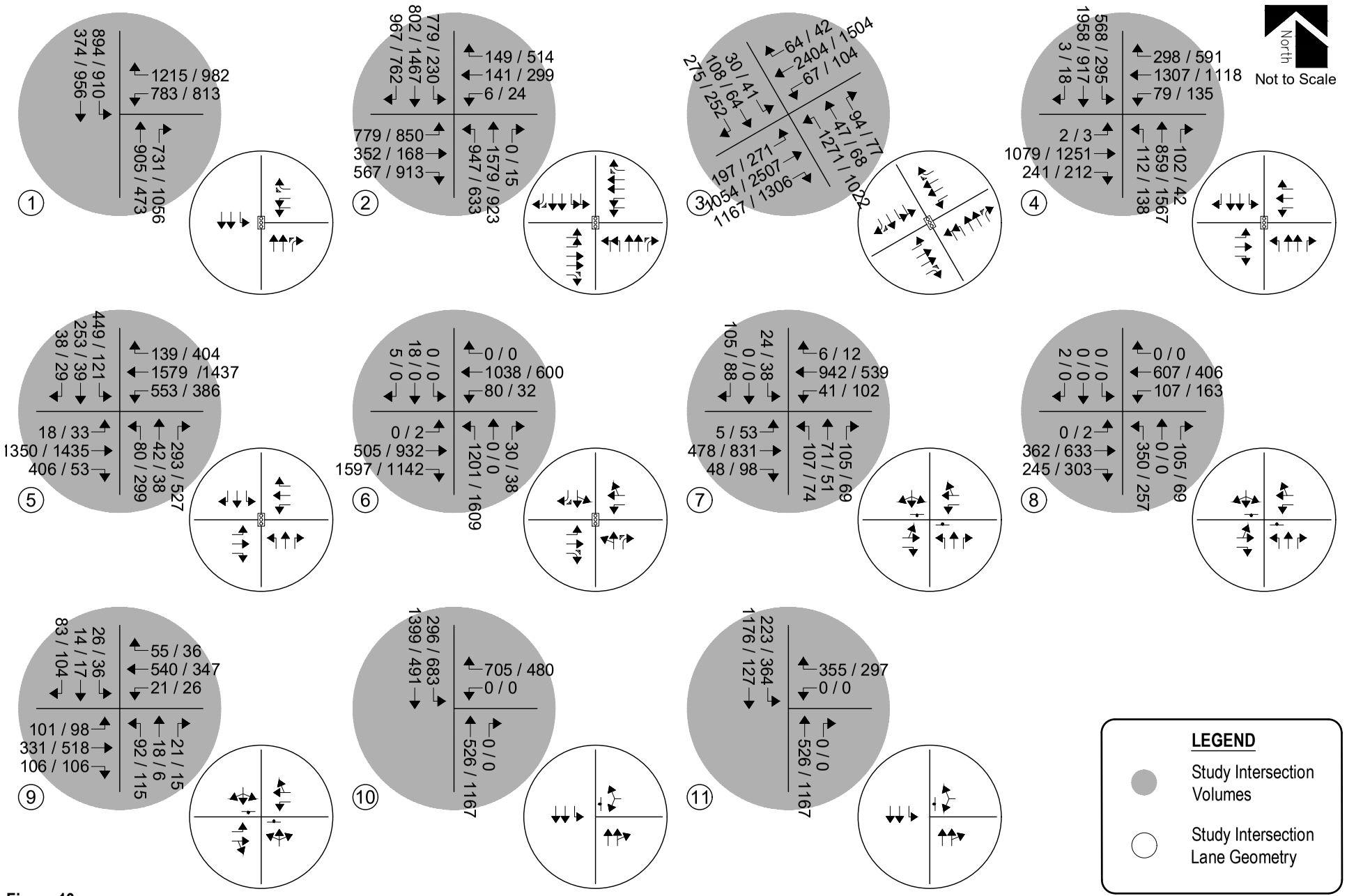


Figure 13
TOTAL TRAFFIC - YEAR 2045
Volumes & Intersection Geometry
AM / PM Peak Hour

VI. Project Impacts

The analyses and procedures described in this study were performed in accordance with the latest HCM and are based upon the worst-case conditions that occur during a typical weekday upon build-out of site development and analyzed land uses. Therefore, study intersections are likely to operate with traffic conditions better than those described within this study, which represent the peak hours of weekday operations only.

Peak Hour Intersection Levels of Service – Total Traffic

As with background traffic, the operations of the study intersections were analyzed under projected total traffic conditions using the SYNCHRO computer program. Total traffic level of service analysis results for Years 2030 and 2045 are summarized in Table 7 and Table 8, respectively.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets are provided in Appendix C.

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2030

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	D (36.9)	C (23.5)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	D (44.5)	D (40.1)
3) U.S. Highway 24 / State Highway 94 (Signalized)	F (113.4)	E (78.2)
4) State Highway 94 / Marksheffel Road (Signalized)	F (151.9)	F (136.2)
5) State Highway 94 / Curtis Road (Signalized)	F (147.5)	F (128.5)
6) State Highway 94 / Enoch Road (Signalized)	F (163.3)	F (207.2)
7) State Highway 94 / Slocum Road / Access B (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Left	A	B
Northbound Left	F	F
Northbound Through	F	F
Northbound Right	B	C
Southbound Left, Through and Right	F	F
8) State Highway 94 / Drake Drive / Access A (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Left	A	B
Northbound Left	F	F
Northbound Through	A	A
Northbound Right	B	B
Southbound Left, Through and Right	B	A
9) State Highway 94 / S Peyton Highway (Stop-Controlled)		
Eastbound Left	A	A
Westbound Left	A	A
Northbound Left, Through and Right	F	F
Southbound Left, Through and Right	C	C
10) Enoch Road / Access C (Stop-Controlled)		
Westbound Left and Right	F	F
Southbound Left	B	F
11) Enoch Road / Access D (Stop-Controlled)		
Westbound Left and Right	C	C
Southbound Left	A	C

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Table 8 – Intersection Capacity Analysis Summary – Total Traffic – Year 2045

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	E (77.5)	D (43.6)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	F (98.9)	F (88.7)
3) U.S. Highway 24 / State Highway 94 (Signalized)	F (182.5)	F (158.6)
4) State Highway 94 / Marksheffel Road (Signalized)	F (249.4)	F (217.4)
5) State Highway 94 / Curtis Road (Signalized)	F (222.5)	F (256.5)
6) State Highway 94 / Enoch Road (Signalized)	F (204.9)	F (288.0)
7) State Highway 94 / Slocum Road / Access B (Stop-Controlled)		
Eastbound Left and Through	B	A
Westbound Left	A	B
Northbound Left	F	F
Northbound Through	F	F
Northbound Right	B	C
Southbound Left, Through and Right	F	F
8) State Highway 94 / Drake Drive / Access A (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Left	A	B
Northbound Left	F	F
Northbound Through	A	A
Northbound Right	B	B
Southbound Left, Through and Right	B	A
9) State Highway 94 / S Peyton Highway (Stop-Controlled)		
Eastbound Left	A	A
Westbound Left	A	A
Northbound Left, Through and Right	F	F
Southbound Left, Through and Right	C	E
10) Enoch Road / Access C (Stop-Controlled)		
Westbound Left and Right	F	F
Southbound Left	B	F
11) Enoch Road / Access D (Stop-Controlled)		
Westbound Left and Right	F	E
Southbound Left	A	D

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out

Table 8 illustrates how, by Year 2045 and upon development build-out, the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS E during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The signalized intersection of S Powers Boulevard with Milton E Proby Parkway expects overall operations at LOS F during both peak traffic hours.

The signalized intersections of State Highway 94 with U.S. Highway 24, Marksheffel Road, Curtis Road, and Enoch Road predict overall operations at LOS F during both peak traffic hours.

The stop-controlled intersections along State Highway 94 and Enoch Road, including site access drives, project turn movement operations at or better than LOS C during the morning peak traffic hour and LOS D or better during the afternoon peak traffic hour. Exceptions include various northbound and southbound turning movements which operate at LOS E and LOS F during their respective peak traffic hour. The LOS E and LOS F operations are attributed to the through traffic volume along State Highway 94 and the stop-controlled nature of the intersections.

Total Traffic Auxiliary Lane Analysis

Auxiliary lanes for site development access drives were based on the County's ECM and CDOT's SHAC.

An evaluation of auxiliary lane requirements, pursuant to Section 2.3.7 of the County's ECM, reveals how exclusive left turn lanes are required along minor arterial roadways and lower classifications if projected peak hour turning volumes meet or exceed 25 vehicles per hour (VPH). Additionally, right turn lanes are required along minor arterial roadways and lower classifications if projected peak hour turning volumes meet or exceed 50 VPH.

Sections 3.8(5) and 4.8(2) of CDOT's SHAC reveals how exclusive left turn lanes along State Highway 83 are required if projected peak hour left turning volumes exceed 10 VPH, and exclusive right turn lanes are required if projected peak hour right turning volumes exceed 25 VPH.

Auxiliary lane requirements and appropriate turn lane lengths are illustrated within the 95th percentile queue length results in Tables 9 and 10.

Due to the conservative analysis performed throughout this study and the preliminary nature of the land uses and densities proposed within the Flying Horse East sketch plan, it is expected that auxiliary lane requirements evaluated within this study may need to be updated by more specific traffic analyses or studies with each final plat filing or as actual area development occurs, to help assess if or when transportation improvements are needed to meet municipal vehicle volume thresholds.

Queue Length Analysis

Queue lengths for the study intersections were analyzed using Year 2030 and Year 2045 total traffic conditions. The analysis yields estimate of 95th percentile queue lengths, which have only a five percent probability of being exceeded during the analysis time period. An average vehicle length of 25 feet was assumed. Queue lengths were modeled and are included with the Synchro worksheets in Appendix C.

Tables 9 and 10 summarize the 95th percentile queue results in comparison to the projected storage requirements for turn movements within study area for Years 2030 and 2045, respectively.

Table 9 – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2030

Intersection		Turn Movement		Existing Turn Lane Length (feet)	AM Peak Hour 95th Percentile Queue Length (feet)	PM Peak Hour 95th Percentile Queue Length (feet)	Recommended Turn Lane Length (feet)
Signalized Intersections							
1	S Powers Boulevard (SH-21) / Bradley Road	WB	L	620' x2	406'	380'	620' x2
			R	620' (C)	0'	0'	620' (C)
		NB	T	-	405'	207'	-
			R	635' (C)	0'	0'	635' (C)
		SB	L	670'	859'	770'	430' x2
			T	-	53'	159'	-
2	S Powers Boulevard (SH-21) / Milton E Proby Parkway	EB	L	645' x2	366'	393'	645' x2
			T	-	146'	72'	-
			R	350' (C)	0'	0'	350' (C)
		WB	L	590'	18'	42'	590'
			T	-	97'	178'	-
			R	390 (C)	0'	0'	390 (C)
		NB	L	445' x2	432'	347'	445' x2
			T	-	656'	275'	-
			R	265' (C)	0'	0'	265' (C)
		SB	L	250' x2	366'	111'	250' x2
			T	-	294'	616'	-
			R	325' (C)	0'	0'	325' (C)
3	U.S. Highway 24 / State Highway 94	EB	L	925'	25'	30'	925'
			T	-	186'	105'	-
			R	670' (C)	0'	0'	670' (C)
		WB	L	780'	302'	477'	780'
			T	-	7'	18'	-
			R	790' (C)	0'	0'	790' (C)
		NB	L	475' x2	301'	336'	475' x2
			T	-	332'	1117'	-
			R	505' (C)	0'	0'	505' (C)
		SB	L	230' x2	99'	236'	230' x2
			T	-	1146'	534'	-
			R	275' (C)	0'	0'	275' (C)
4	State Highway 94 / Marksheffel Road	EB	L	280'	0'	1'	280'
			T	-	1113'	1404'	-
			R	240'	75'	53'	240'
		WB	L	220'	146'	199'	220'
			T	-	1611'	1147'	-
			R	255'	114'	238'	255'
		NB	L	365'	95'	134'	365'
			T	-	393'	866'	-
			R	395'	7'	0'	395'
		SB	L	390'	651'	403'	330' x2
			T	-	986'	361'	-
			R	415'	0'	0'	415'
5	State Highway 94 / Curtis Road	EB	L	500'	9'	12'	500'
			T	-	1541'	1681'	-
			R	440'	140'	0'	440'
		WB	L	500'	248'	162'	500'
			T	-	576'	418'	-
			R	375'	0'	0'	375'
		NB	L	315'	92'	378'	290'
			T	-	52'	49'	-
			R	275'	106'	688'	290'
		SB	L	530'	588'	155'	290'
			T	-	226'	52'	-
			R	415'	0'	0'	415'
6	State Highway 94 / Enoch Road	EB	L	115'	0'	0'	115'
			T	-	309'	637'	-
			R	600' (C)	21'	0'	600' (C)
		WB	L	190'	96'	58'	190'
			T,R	-	1289'	703'	-
		NB	L,T	-	1666'	2015'	-
			R	240' (C)	0'	0'	240' (C)
		SB	L,T	-	15'	0'	-
			R	100'	0'	0'	100'

Key: x2 = Dual Turn Lanes. C = Channelized.

Table 9 Continued – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2030

	Intersection	Turn Movement		Existing Turn Lane Length (feet)	AM Peak Hour 95th Percentile Queue Length (feet)	PM Peak Hour 95th Percentile Queue Length (feet)	Recommended Turn Lane Length (feet)
Stop-Controlled Intersections							
7	State Highway 94 / Slocum Road / Access B	EB	L,T	-	0'	3'	-
			R	-	0'	0'	800'
		WB	L	-	3'	13'	900'
			T,R	-	0'	0'	-
		NB	L	-	263'	308'	115'
			T		73'	75'	-
			R	-	18'	18'	-
		SB	L,T,R	-	183'	328'	-
8	State Highway 94 / Drake Drive / Access A	EB	L,T	-	0'	0'	-
			R	-	0'	0'	800'
		WB	L	-	10'	23'	900'
			T,R	-	0'	0'	-
		NB	L	-	750'	615'	115'
			T		0'	0'	-
			R	-	25'	28'	-
		SB	L,T,R	-	0'	0'	-
9	State Highway 94 / S Peyton Highway	EB	L	515'	8'	8'	515'
			T,R	-	0'	0'	-
		WB	L	520'	0'	3'	520'
			T,R	-	0'	0'	-
		NB	L,T,R	-	108'	135'	-
		SB	L,T,R	-	33'	43'	-
10	Enoch Road / Access C	WB	L,R	-	473'	375'	-
		NB	T,R	-	0'	0'	-
		SB	L	-	33'	540'	115'
			T	-	0'	0'	-
11	Enoch Road / Access D	WB	L,R	-	78'	110'	-
		NB	T,R	-	0'	0'	-
		SB	L	-	23'	98'	115'
			T	-	0'	0'	-

Key: x2 = Dual Turn Lanes. C = Channelized. T - Approach Taper.

Table 10 – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2045

	Intersection	Turn Movement		Existing Turn Lane Length (feet)	AM Peak Hour 95th Percentile Queue Length (feet)	PM Peak Hour 95th Percentile Queue Length (feet)	Recommended Turn Lane Length (feet)
Signalized Intersections							
1	S Powers Boulevard (SH-21) / Bradley Road	WB	L	620' x2	559'	528'	620' x2
			R	620' (C)	0'	0'	620' (C)
		NB	T	-	579'	322'	-
			R	635' (C)	0'	0'	635' (C)
		SB	L	670'	1156'	1085'	580' x2
			T	-	66'	224'	-
2	S Powers Boulevard (SH-21) / Milton E Proby Parkway	EB	L	645' x2	555'	598'	645' x2
			T	-	194'	92'	-
			R	350' (C)	0'	0'	350' (C)
		WB	L	590'	10'	25'	590'
			T	-	139'	258'	-
			R	390 (C)	0'	0'	390 (C)
		NB	L	445' x2	545'	477'	445' x2
			T	-	1032'	405'	-
			R	265' (C)	0'	0'	265' (C)
		SB	L	250' x2	555'	140'	280' x2
			T	-	481'	942'	-
			R	325' (C)	0'	0'	325' (C)
3	U.S. Highway 24 / State Highway 94	EB	L	925'	30'	38'	925'
			T	-	249'	149'	-
			R	670' (C)	0'	0'	670' (C)
		WB	L	780'	292'	441'	780'
			T	-	7'	19'	-
			R	790' (C)	0'	0'	790' (C)
		NB	L	475' x2	198'	217'	475' x2
			T	-	454'	1701'	-
			R	505' (C)	0'	2'	505' (C)
		SB	L	230' x2	134'	232'	230' x2
			T	-	1646'	837'	-
			R	275' (C)	0'	0'	275' (C)
4	State Highway 94 / Marksheffel Road	EB	L	280'	1'	1'	280'
			T	-	1436'	1638'	-
			R	240'	109'	69'	240'
		WB	L	220'	152'	276'	220'
			T	-	1892'	1442'	-
			R	255'	168'	420'	800'
		NB	L	365'	161'	204'	365'
			T	-	566'	1190'	-
			R	395'	30'	8'	395'
		SB	L	390'	881'	499'	445' x2
			T	-	1385'	546'	-
			R	415'	0'	0'	415'
5	State Highway 94 / Curtis Road	EB	L	500'	12'	24'	500'
			T	-	1916'	1991'	-
			R	440'	257'	12'	440'
		WB	L	500'	241'	250'	500'
			T	-	650'	637'	-
			R	375'	2'	1'	375'
		NB	L	315'	146'	395'	290'
			T	-	63'	52'	-
			R	275'	160'	673'	290'
		SB	L	530'	769'	140'	385' x2
			T	-	297'	53'	-
			R	415'	0'	0'	415'
6	State Highway 94 / Enoch Road	EB	L	115'	0'	0'	115'
			T	-	289'	708'	-
			R	600' (C)	28'	0'	600' (C)
		WB	L	190'	153'	77'	190'
			T,R	-	1526'	792'	-
		NB	L,T	-	1769'	2430'	-
			R	240' (C)	0'	0'	240' (C)
		SB	L,T	-	19'	0'	-
			R	100'	0'	0'	100'

Key: x2 = Dual Turn Lanes. C = Channelized.

Table 10 Continued – Turn Lane Queues and Storage Requirements – Total Traffic – Year 2045

Intersection		Turn Movement		Existing Turn Lane Length (feet)	AM Peak Hour 95th Percentile Queue Length (feet)	PM Peak Hour 95th Percentile Queue Length (feet)	Recommended Turn Lane Length (feet)
Stop-Controlled Intersections							
7	State Highway 94 / Slocum Road / Access B	EB	L,T	-	0'	5'	-
			R	-	0'	0'	800'
		WB	L	-	3'	15'	900'
			T,R	-	0'	0'	-
		NB	L	-	310'	225'	115'
			T		113'	115'	-
			R	-	20'	20'	-
		SB	L,T,R	-	378'	265'	-
8	State Highway 94 / Drake Drive / Access A	EB	L,T	-	0'	0'	-
			R	-	0'	0'	800'
		WB	L	-	10'	25'	900'
			T,R	-	0'	0'	-
		NB	L	-	903'	728'	115'
			T		0'	0'	-
			R	-	15'	375'	-
		SB	L,T,R	-	0'	0'	-
9	State Highway 94 / S Peyton Highway	EB	L	515'	10'	8'	515'
			T,R	-	0'	0'	-
		WB	L	520'	3'	3'	520'
			T,R	-	0'	0'	-
		NB	L,T,R	-	240'	270'	-
		SB	L,T,R	-	78'	95'	-
10	Enoch Road / Access C	WB	L,R	-	520'	540'	-
		NB	T,R	-	0'	0'	-
		SB	L	-	35'	830'	115'
			T	-	0'	0'	-
11	Enoch Road / Access D	WB	L,R	-	1090'	160'	-
		NB	T,R	-	0'	0'	-
		SB	L	-	25'	150'	115'
			T	-	0'	0'	-

Key: x2 = Dual Turn Lanes. C = Channelized.

Pedestrian Circulation & Safety Analysis

In accordance with Section B.2.4.B of the County's ECM, an assessment to pedestrian connectivity and safety was considered. However, it is emphasized that the sketch plan analyzed throughout this study represents preliminary land uses and density. Therefore, specific details on pedestrian circulation and connectivity cannot be determined.

The proposed development is expected to accommodate pedestrians and bicyclists with sidewalks along the study roadways bordering the site and connecting into the site.

In review of the County's MTCP, primary regional trails and bicycle routes are planned along the study segments of State Highway 94, S Peyton Highway, Curtis Road, Bradley Road, S Powers Boulevard, Marksheffel Road, and U.S. Highway 24.

With the assumption that future site plans are designed per the County's ECM, and pursuant to the Federal Highway Administration's (FHWA) Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations[12], pedestrian safety is not expected to be of concern. Moreover, traffic calming and pedestrian crossing treatments are not applicable, and traffic calming is not recommended for the proposed conditions.

As actual land uses, densities, site plans, or with each final plat filing within the Flying Horse East sketch plan become defined over time and through additional County land use approval procedures, it is assumed that this evaluation of pedestrian circulation and connectivity may need to be updated.

Transportation Demand Management Plan

Pursuant to Section B.2.4.B of the County's ECM, a Transportation Demand Management (TDM) Plan for the proposed development was prepared in order to identify features, measures, and strategies designed to reduce single-occupant vehicle (SOV) trips and maximize the use of alternate modes of transportation. As it relates to this development site and the overall area, these alternate modes of transportation include, but may not be limited to, public bus routes, shuttles, car-pooling, bicycling, scooters, and walking. This is consistent with transportation facilities and services described within the County's MTCP and the Pikes Peak Area Council of Governments (PPACG) 2045 Regional Transportation Plan – Transit[13],

[12] Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, Federal Highway Administration, July 2018.
[13] 2045 Regional Transportation Plan – Transit, Mountain Metropolitan Transit, January 8, 2020.

One method includes the availability of public bus routes. The City of Colorado Springs provides the Mountain Metropolitan Transit (MMT). While MMT currently does not provide service in unincorporated areas of El Paso County, transit services are expected to be available upon buildout of the overall development area in the long-term future. Additional transit services for unincorporated areas of El Paso County, as described within the MTCP, include Envida and Mountain Metro bus routes. These public modes of transportation are expected to be affordable and easy to access.

Residents, tenants, visitors, or employees of the overall development area may also be encouraged to travel by bicycle or by walking. Within the immediate area, public sidewalks and pedestrian trails will be available to allow for connectivity within the greater area. Urban and regional trails exist within the overall area, as shown in the MTCP, and are planned to be improved in the future. Other forms of transportation may also be available that encourage the use of these pedestrian routes, including electric scooters and electric bicycles.

As site plans within Flying Horse East develop, they may consider promoting alternate modes of pedestrian travel and accommodations as needed. In reference to the City and County of Denver's TDM Guide, general strategies and tools for implementing a successful TDM Plan may include subsidized transit passes, investments in future transit stops, transit connection services, and passenger pick-up / drop-off areas used in conjunction with transit connection services. Bicycle and pedestrian strategies may include shared bicycle amenities, bike, e-bike, or scooter share/loan programs, subsidized shared mobility programs, or pedestrian wayfindings. Parking and car-share strategies may include parking fees, parking cash-out programs, or incentivized carpooling programs. Supportive strategies may include membership in a Transportation Management Association (TMA), transportation incentive fundings, transit screens and information kiosks, new resident kits, or teleworking policies. Event-related TDM strategies may include one-time transit passes, valet bicycle parking, or special event transit services.

VII. Additional Analysis

Additional analysis was conducted to reflect total traffic conditions with consideration for potential roadway and intersection improvements to support regional traffic growth and site-generated trips in such a manner that the County's design objective of LOS D are being satisfied for all study area roadways and intersections.

As previously mentioned, various study intersections are shown to operate below the County's LOS D design objective during their respective short-term and long-term scenarios. However, neither the City, County, nor CDOT have committed plans to improve the study area roadways in order to support regional growth and the level of in-fill development expected for the overall area.

As discussed in Section I, review of PPACG's 2045 Long Range Transportation Plan suggests that long-range transportation plans are currently being evaluated for the State Highway 94 corridor, S Powers Boulevard, U.S. Highway 24 west of State Highway 94, Curtis Road north of State Highway 94, and for a potential extension of Bradley Road west of S Powers Boulevard. Additionally, the 2045 Long Range Transportation Plan envisions Enoch Road as a 4-lane roadway.

In further review of PPACG's 2045 Long Range Transportation Plan and in conjunction with six regional governments including the Pikes Peak Rural Transportation Authority (PPRTA), CDOT, El Paso County, and City of Colorado Springs, it is understood that PPACG's Metropolitan Planning Organization (MPO) is in the process of seeking funds through their Transportation Improvement Program (TIP) to implement the long-term plans being evaluated for the study area roadways. It is therefore unknown at this time what improvements are being planned for and their timelines (i.e., roadway upgrades, roadway widenings, intersection control improvements, etc.).

Peak Hour Intersection Levels of Service – Total Traffic – Mitigation

Similar to Section VI, below is a summary of operations for the study intersections projected for total traffic conditions using the SYNCHRO computer program. Tables 11 and 12 reflect potential mitigating improvements to support site development trips for Years 2030 and 2045, reservedly, in order to satisfy the County's design objection for LOS D.

Definitions of levels of service are given in Appendix B. Intersection capacity worksheets for these mitigating scenarios are provided in Appendix D.

Table 11 – Mitigated Intersection Capacity Analysis Summary – Total Traffic – Year 2030

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	D (36.9)	C (23.5)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	D (44.5)	D (40.1)
3) U.S. Highway 24 / State Highway 94 (Signalized)	D (40.6)	C (34.7)
4) State Highway 94 / Marksheffel Road (Signalized)	D (49.5)	E (59.9)
5) State Highway 94 / Curtis Road (Signalized)	C (33.2)	C (34.2)
6) State Highway 94 / Enoch Road (Signalized)	C (33.0)	C (29.1)
7) State Highway 94 / Slocum Road / Access B (Signalized)	C (22.0)	B (14.8)
8) State Highway 94 / Drake Drive / Access A (Signalized)	C (21.1)	B (14.9)
9) State Highway 94 / S Peyton Highway (Stop-Controlled) Eastbound Left Westbound Left Northbound Left Northbound Through and Right Southbound Left, Through and Right	 A A F C C	 A A F B C
10) Enoch Road / Access C (Stop-Controlled) Westbound Left and Right Southbound Left	 F B	 F F
11) Enoch Road / Access D (Stop-Controlled) Westbound Left and Right Southbound Left	 C A	 C C

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Table 12 – Mitigated Intersection Capacity Analysis Summary – Total Traffic – Year 2045

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
1) S Powers Boulevard / Bradley Road (Signalized)	C (30.8)	D (43.6)
2) S Powers Boulevard / Milton E Proby Parkway (Signalized)	F (98.9)	F (88.7)
3) U.S. Highway 24 / State Highway 94 (Signalized)	E (70.9)	E (57.2)
4) State Highway 94 / Marksheffel Road (Signalized)	D (52.2)	E (60.3)
5) State Highway 94 / Curtis Road (Signalized)	D (49.9)	D (45.8)
6) State Highway 94 / Enoch Road (Signalized)	D (52.4)	D (45.3)
7) State Highway 94 / Slocum Road / Access B (Signalized)	C (29.7)	C (29.1)
8) State Highway 94 / Drake Drive / Access A (Signalized)	C (22.3)	C (21.3)
9) State Highway 94 / S Peyton Highway (Stop-Controlled) Eastbound Left Westbound Left Northbound Left Northbound Through and Right Southbound Left, Through and Right	 A A F C E	 A A F C E
10) Enoch Road / Access C (Stop-Controlled) Westbound Left and Right Southbound Left	 F B	 F F
11) Enoch Road / Access D (Stop-Controlled) Westbound Left and Right Southbound Left	 F A	 E D

Key: Signalized Intersection: Level of Service (Control Delay in sec/veh)
Stop-Controlled Intersection: Level of Service

Total Traffic Analysis Results Upon Development Build-Out – Mitigated

Table 8 illustrates how, by Year 2045, upon development build-out, and with consideration for potential mitigation solutions, the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The signalized intersection of S Powers Boulevard with Milton E Proby Parkway has overall operations at LOS F during both peak traffic hours. To mitigate the poor operations anticipated, adjustments to signal timing splits and intersection geometry were considered. However, since the poor operations are due to the intersection being over-capacity, these mitigations were not found to provide acceptable levels of service. Therefore, the construction of a grade-separated interchange at this intersection is a potential solution to mitigate the poor operations. This recommendation is consistent with the Finding of No Significant Impact for Powers Boulevard (SH 21) study[14] and CDOT's Interchange Project, both of which consider the benefit of interchanges at intersections along the N Powers Boulevard corridor.

[14] Finding of No Significant Impact for Powers Boulevard (SH 21), Colorado Department of Transportation, December 2010.

The signalized intersection of State Highway 94 with U.S. Highway 24 has overall operations at LOS E during the morning and afternoon peak traffic hours.

The signalized intersection of State Highway 94 with U Marksheffel Road projects overall operations at LOS D during the morning peak traffic hour and LOS E during the afternoon peak traffic hour.

The signalized intersections of State Highway 94 with Curtis Road and Enoch Road project overall operations at LOS D during both peak traffic hours.

Under signalized conditions, intersections of State Highway 94 with Slocum Road/Access B and Drake Drive/Access A expect overall operations at LOS C during both peak traffic hours.

The stop-controlled intersections along State Highway 94 and Enoch Road, including Access C and Access D, project turn movement operations at or better than LOS C during the morning peak traffic hour and LOS D or better during the afternoon peak traffic hour. Exceptions include various northbound and southbound turning movements which operate at LOS E and LOS F during their respective peak traffic hour. The LOS E and LOS F operations are attributed to the through traffic volume along State Highway 94 and the stop-controlled nature of the intersections.

VIII. Conclusion

This master traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled Flying Horse East. This proposed mixed-use development consists of single-family and multifamily housing, a charter school, business park, and general retail space. The development is located southeast of the Enoch Road and State Highway 94 intersection in El Paso County, Colorado.

The study area to be examined in this analysis encompasses the area bounded by State Highway 94 south to Bradley Road, and from State Highway 21 east to S Peyton Highway. Proposed site access drives were also included within this analysis.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2030 and Year 2045 background traffic conditions, and Year 2030 and Year 2045 total traffic conditions.

Analysis of existing traffic conditions indicates that the signalized intersection of S Powers Boulevard with Bradley Road has overall operations at LOS B during the morning and afternoon peak traffic hours. The signalized intersection of S Powers Boulevard with Milton E Proby Parkway has overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour. The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road have overall operations at LOS C during the morning and afternoon peak traffic hours. The signalized intersection of State Highway 94 with Curtis Road has overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. The signalized intersection of State Highway 94 with Enoch Road has overall operations at LOS A during the morning peak traffic hour and LOS D during the afternoon peak traffic hour. The stop-controlled intersections along State Highway 94 have turn movement operations at or better than LOS B during both peak traffic hours.

Without the proposed development, Year 2030 background operational analysis shows that the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. The signalized intersection of S Powers Boulevard with Milton E Proby Parkway expects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour. The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road predict overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour. The signalized intersection of State Highway 94 with Curtis Road project overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. The signalized intersection of State Highway 94 with Enoch Road expects overall operations at LOS A during the morning peak traffic hour and LOS D during the afternoon peak traffic hour. The stop-controlled intersections along State Highway 94 project turn movement operations at or better than LOS B during both peak traffic hours.

By Year 2045 and without the proposed development, the signalized intersection of S Powers Boulevard with Bradley Road projects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour. The signalized intersection of S Powers Boulevard with Milton E Proby Parkway expects overall operations at LOS F during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The signalized intersections of State Highway 94 with U.S. Highway 24 and Marksheffel Road predict overall operations at LOS F during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The signalized intersection of State Highway 94 with Curtis Road projects overall operations at LOS D during the morning peak traffic hour and LOS C during the afternoon peak traffic hour. The signalized intersection of State Highway 94 with Enoch Road expects overall operations at LOS A during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The stop-controlled intersections along State Highway 94 project turn movement operations at or better than LOS C during both peak traffic hours.

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create minimal impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2045 background traffic conditions. Proposed site accesses have long-term operations at LOS D or better during peak traffic periods and upon build-out. Exceptions include various northbound and southbound turning movements which operate at LOS E and LOS F during their respective peak traffic hour.

Recommended Improvements

Recommended roadway and intersection control improvements associated with the proposed Flying Horse East development were considered. However, considering how there are no known committed or planned improvements for the study area roadways and intersections, it is unknown what improvements are specific to the Flying Horse East sketch plan. It is assumed that once PPACG and other applicable governments commit to and define timelines for specific roadway improvements, and once specific site plans within Flying Horse East become defined, recommended improvements associated with the Flying Horse East sketch plan can be determined at that time.

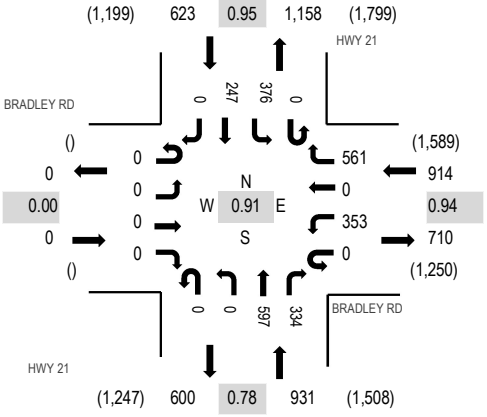
APPENDIX A

Traffic Count Data

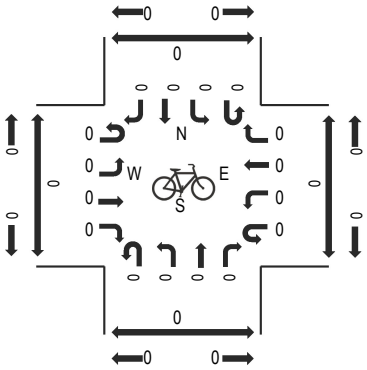
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 HWY 21 & BRADLEY RD AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

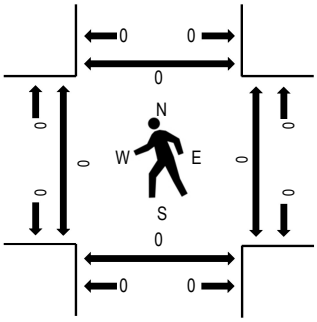
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

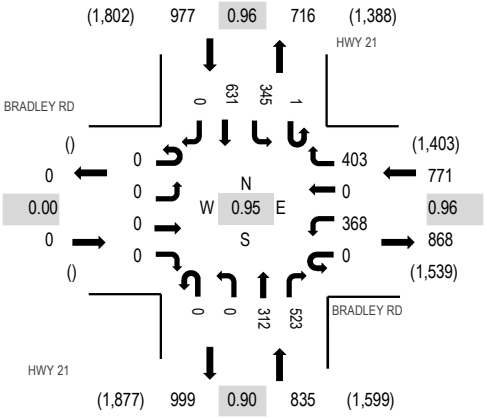
Traffic Counts - Motorized Vehicles

Interval Start Time	BRADLEY RD Eastbound				BRADLEY RD Westbound				HWY 21 Northbound				HWY 21 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	94	0	149	0	0	146	78	0	81	61	0	609	2,468	0	0	0	0
7:15 AM	0	0	0	0	0	80	0	158	0	0	184	115	0	90	54	0	681	2,338	0	0	0	0
7:30 AM	0	0	0	0	0	88	0	136	0	0	152	72	0	110	63	0	621	2,167	0	0	0	0
7:45 AM	0	0	0	0	0	91	0	118	0	0	115	69	0	95	69	0	557	2,005	0	0	0	0
8:00 AM	0	0	0	0	0	93	0	82	1	0	97	53	0	83	70	0	479	1,828	0	0	0	0
8:15 AM	0	0	0	0	0	105	0	84	0	0	83	71	0	88	79	0	510		0	0	0	0
8:30 AM	0	0	0	0	0	97	0	82	0	0	90	65	0	67	58	0	459		0	0	0	0
8:45 AM	0	0	0	0	0	71	0	61	0	0	62	55	0	58	73	0	380		0	0	0	0
Count Total	0	0	0	0	0	719	0	870	1	0	929	578	0	672	527	0	4,296		0	0	0	0
Peak Hour	0	0	0	0	0	353	0	561	0	0	597	334	0	376	247	0	2,468		0	0	0	0

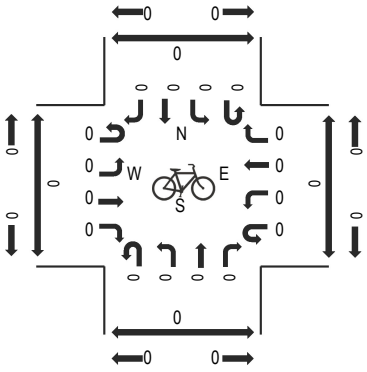
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 HWY 21 & BRADLEY RD PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

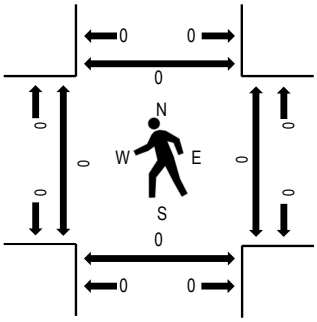
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

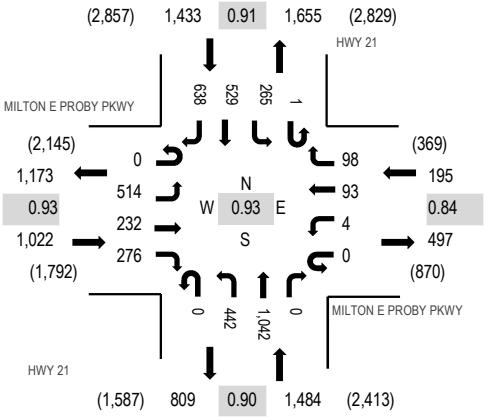
Traffic Counts - Motorized Vehicles

Interval Start Time	BRADLEY RD Eastbound				BRADLEY RD Westbound				HWY 21 Northbound				HWY 21 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	79	0	100	0	0	73	134	0	87	153	0	626	2,583	0	0	0	0
4:15 PM	0	0	0	0	0	84	0	109	0	0	81	151	1	97	157	0	680	2,518	0	0	0	0
4:30 PM	0	0	0	0	0	101	0	100	0	0	77	119	0	82	149	0	628	2,486	0	0	0	0
4:45 PM	0	0	0	0	0	104	0	94	0	0	81	119	0	79	172	0	649	2,389	0	0	0	0
5:00 PM	0	0	0	0	0	79	0	93	0	0	73	121	0	76	119	0	561	2,221	0	0	0	0
5:15 PM	0	0	0	0	0	94	0	79	0	0	112	126	0	75	162	0	648		0	0	0	0
5:30 PM	0	0	0	0	0	80	0	72	0	0	94	80	0	61	144	0	531		0	0	0	0
5:45 PM	0	0	0	0	0	72	0	63	0	0	86	72	0	60	128	0	481		0	0	0	0
Count Total	0	0	0	0	0	693	0	710	0	0	677	922	1	617	1,184	0	4,804		0	0	0	0
Peak Hour	0	0	0	0	0	368	0	403	0	0	312	523	1	345	631	0	2,583		0	0	0	0

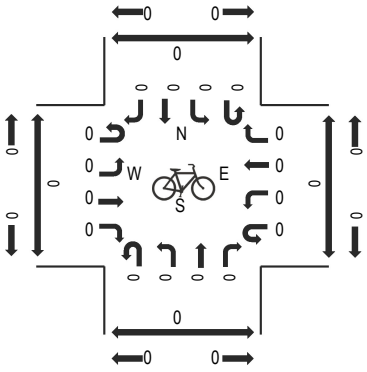
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 HWY 21 & MILTON E PROBY PKWY AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

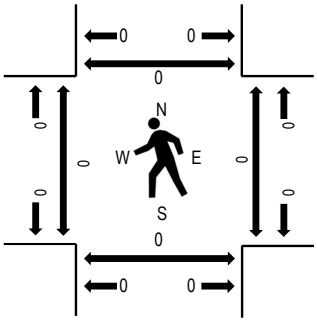
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MILTON E PROBY PKWY Eastbound				MILTON E PROBY PKWY Westbound				HWY 21 Northbound				HWY 21 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	136	72	64	0	4	24	20	0	96	238	0	1	66	118	172	1,011	4,134	0	0	0	0
7:15 AM	0	135	60	80	0	0	27	31	0	119	293	0	0	74	121	166	1,106	3,980	0	0	0	0
7:30 AM	0	124	55	59	0	0	26	29	0	113	292	0	0	62	117	110	987	3,721	0	0	0	0
7:45 AM	0	119	45	73	0	0	16	18	0	114	219	0	0	63	173	190	1,030	3,563	0	0	0	0
8:00 AM	0	86	51	65	1	3	14	15	0	54	182	0	1	68	150	167	857	3,297	0	0	0	0
8:15 AM	0	94	43	73	0	2	11	29	0	45	181	0	0	45	125	199	847		0	0	0	0
8:30 AM	0	93	30	59	0	2	19	36	0	56	161	0	0	45	131	197	829		0	0	0	0
8:45 AM	0	87	40	49	0	2	23	17	0	58	192	0	0	50	117	129	764		0	0	0	0
Count Total	0	874	396	522	1	13	160	195	0	655	1,758	0	2	473	1,052	1,330	7,431		0	0	0	0
Peak Hour	0	514	232	276	0	4	93	98	0	442	1,042	0	1	265	529	638	4,134		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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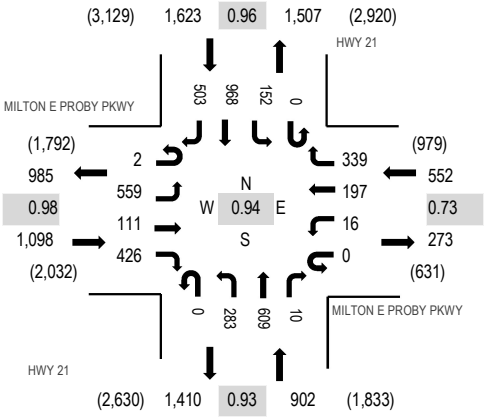
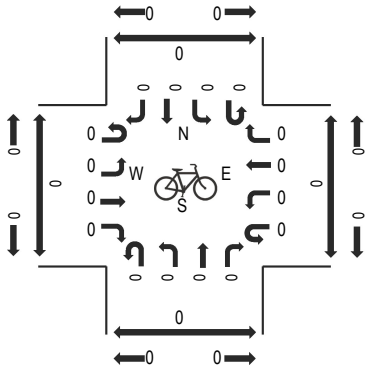
Location: 2 HWY 21 & MILTON E PROBY PKWY PM
Date: Thursday, December 5, 2024
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

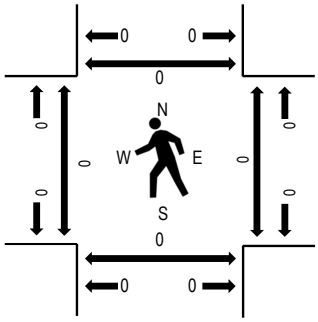
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

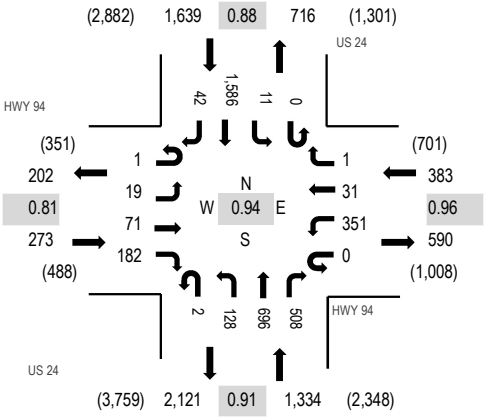
Traffic Counts - Motorized Vehicles

Interval Start Time	MILTON E PROBY PKWY Eastbound				MILTON E PROBY PKWY Westbound				HWY 21 Northbound				HWY 21 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	135	21	52	0	6	61	71	0	67	183	1	0	26	252	122	997	4,129	0	0	0	0
4:15 PM	1	148	34	95	0	3	39	55	0	66	172	6	0	29	274	119	1,041	4,175	0	0	0	0
4:30 PM	1	139	31	105	0	7	79	111	0	76	160	1	0	39	225	131	1,105	4,102	0	0	0	0
4:45 PM	0	137	25	117	0	2	36	68	0	60	137	2	0	33	236	133	986	3,931	0	0	0	0
5:00 PM	0	135	21	109	0	4	43	105	0	81	140	1	0	51	233	120	1,043	3,844	0	0	0	0
5:15 PM	0	118	36	87	0	3	31	88	0	67	150	1	0	46	243	98	968		0	0	0	0
5:30 PM	0	100	39	89	0	4	32	58	0	53	174	4	0	44	218	119	934		0	0	0	0
5:45 PM	0	109	67	81	0	1	32	40	0	42	187	2	0	71	184	83	899		0	0	0	0
Count Total	2	1,021	274	735	0	30	353	596	0	512	1,303	18	0	339	1,865	925	7,973		0	0	0	0
Peak Hour	2	559	111	426	0	16	197	339	0	283	609	10	0	152	968	503	4,175		0	0	0	0

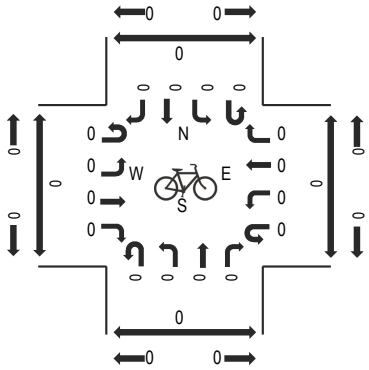
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 US 24 & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

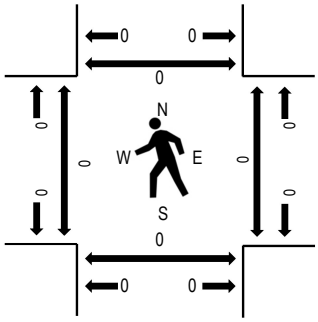
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

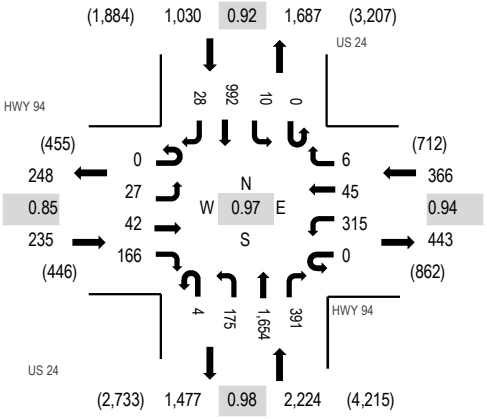
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				US 24 Northbound				US 24 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	1	3	8	34	0	73	8	0	1	24	150	144	0	1	454	9	910	3,629	0	0	0	0
7:15 AM	0	7	22	60	0	97	9	0	1	42	154	128	0	0	375	11	906	3,542	0	0	0	0
7:30 AM	0	4	19	53	0	90	4	1	0	33	210	124	0	6	414	12	970	3,315	0	0	0	0
7:45 AM	0	5	22	35	0	91	10	0	0	29	182	112	0	4	343	10	843	3,046	0	0	0	0
8:00 AM	0	5	17	41	0	97	9	0	0	23	153	103	0	5	362	8	823	2,790	0	0	0	0
8:15 AM	1	3	7	42	0	81	7	1	0	13	136	92	0	3	288	5	679		0	0	0	0
8:30 AM	0	2	19	36	0	60	8	0	0	22	142	95	0	3	305	9	701		0	0	0	0
8:45 AM	0	5	4	33	0	48	7	0	1	28	138	68	0	2	244	9	587		0	0	0	0
Count Total	2	34	118	334	0	637	62	2	3	214	1,265	866	0	24	2,785	73	6,419		0	0	0	0
Peak Hour	1	19	71	182	0	351	31	1	2	128	696	508	0	11	1,586	42	3,629		0	0	0	0

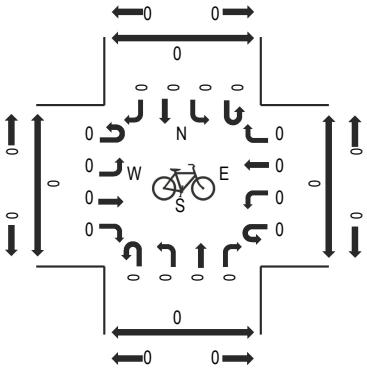
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 US 24 & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

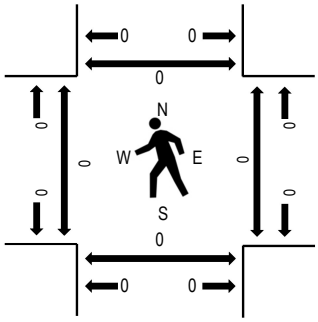
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

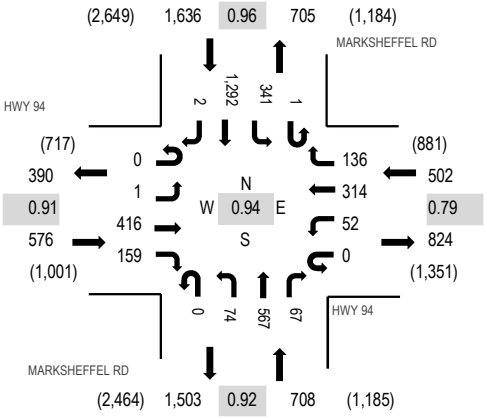
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				US 24 Northbound				US 24 Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	6	11	38	0	89	21	0	1	38	403	104	0	1	241	8	961	3,810	0	0	0	0
4:15 PM	0	11	12	43	0	89	14	2	1	29	437	96	0	2	184	5	925	3,830	0	0	0	0
4:30 PM	0	8	8	41	0	88	15	4	1	31	425	95	0	1	209	7	933	3,855	0	0	0	0
4:45 PM	0	7	9	28	0	100	15	1	0	56	405	96	0	3	265	6	991	3,732	0	0	0	0
5:00 PM	0	3	17	50	0	71	10	1	1	41	420	87	0	3	267	10	981	3,447	0	0	0	0
5:15 PM	0	9	8	47	0	56	5	0	2	47	404	113	0	3	251	5	950		0	0	0	0
5:30 PM	0	6	9	25	0	54	19	2	0	30	356	91	0	3	208	7	810		0	0	0	0
5:45 PM	0	6	4	40	0	53	3	0	0	30	291	84	0	2	190	3	706		0	0	0	0
Count Total	0	56	78	312	0	600	102	10	6	302	3,141	766	0	18	1,815	51	7,257		0	0	0	0
Peak Hour	0	27	42	166	0	315	45	6	4	175	1,654	391	0	10	992	28	3,855		0	0	0	0

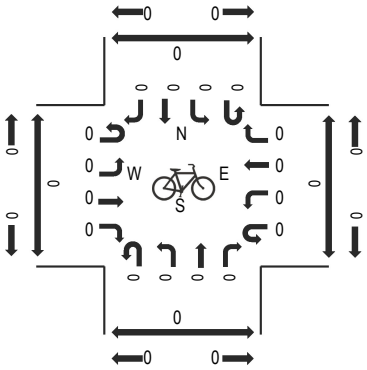
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 MARKSHEFFEL RD & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

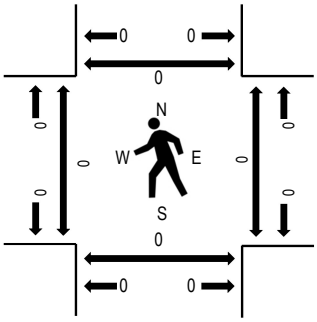
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

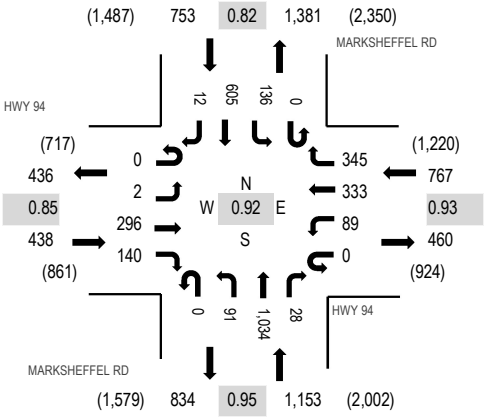
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				MARKSHEFFEL RD Northbound				MARKSHEFFEL RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	116	30	0	9	63	42	0	19	148	25	0	93	317	0	862	3,422	0	0	0	0
7:15 AM	0	0	102	39	0	18	112	34	0	13	157	15	1	88	334	1	914	3,270	0	0	0	0
7:30 AM	0	0	113	46	0	16	83	37	0	13	131	21	0	75	326	1	862	2,939	0	0	0	0
7:45 AM	0	1	85	44	0	9	56	23	0	29	131	6	0	85	315	0	784	2,610	0	0	0	0
8:00 AM	0	0	96	33	0	6	86	37	0	27	108	9	1	63	241	3	710	2,294	0	0	0	0
8:15 AM	0	0	73	31	0	5	67	18	0	14	92	10	0	61	211	1	583		0	0	0	0
8:30 AM	0	0	77	41	0	9	62	24	0	4	82	8	0	41	183	2	533		0	0	0	0
8:45 AM	0	0	42	32	0	3	46	16	0	15	101	7	0	40	166	0	468		0	0	0	0
Count Total	0	1	704	296	0	75	575	231	0	134	950	101	2	546	2,093	8	5,716		0	0	0	0
Peak Hour	0	1	416	159	0	52	314	136	0	74	567	67	1	341	1,292	2	3,422		0	0	0	0

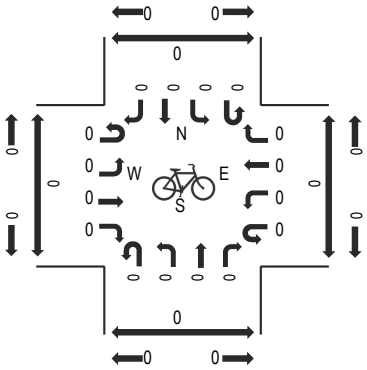
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 MARKSHEFFEL RD & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

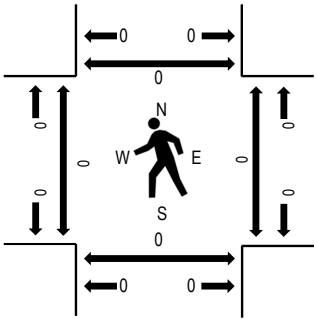
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				MARKSHEFFEL RD Northbound				MARKSHEFFEL RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	75	40	0	28	77	76	0	20	273	4	0	37	144	5	779	3,111	0	0	0	0
4:15 PM	0	0	71	34	0	19	86	101	0	18	274	11	0	30	203	2	849	3,026	0	0	0	0
4:30 PM	0	1	71	31	0	15	74	86	0	27	257	7	0	36	142	3	750	2,843	0	0	0	0
4:45 PM	0	1	79	35	0	27	96	82	0	26	230	6	0	33	116	2	733	2,734	0	0	0	0
5:00 PM	0	0	63	35	0	9	63	44	0	15	254	8	0	35	166	2	694	2,459	0	0	0	0
5:15 PM	0	0	97	34	0	4	61	69	0	10	214	11	0	38	127	1	666		0	0	0	0
5:30 PM	0	0	70	34	0	10	68	38	0	13	180	8	0	32	187	1	641		0	0	0	0
5:45 PM	0	0	68	22	0	4	41	42	0	5	128	3	0	31	113	1	458		0	0	0	0
Count Total	0	2	594	265	0	116	566	538	0	134	1,810	58	0	272	1,198	17	5,570		0	0	0	0
Peak Hour	0	2	296	140	0	89	333	345	0	91	1,034	28	0	136	605	12	3,111		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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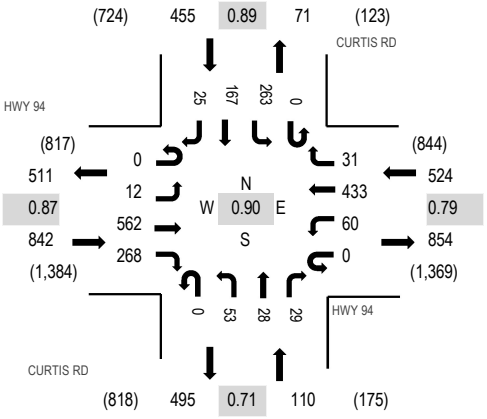
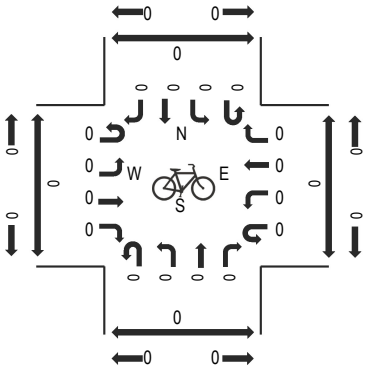
Location: 5 CURTIS RD & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

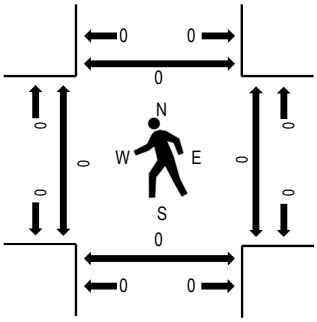
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				CURTIS RD Northbound				CURTIS RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	3	148	52	0	22	129	14	0	9	3	8	0	50	28	7	473	1,931	0	0	0	0
7:15 AM	0	5	162	74	0	13	119	3	0	7	10	8	0	69	53	11	534	1,834	0	0	0	0
7:30 AM	0	3	131	81	0	14	95	6	0	11	5	10	0	81	47	6	490	1,640	0	0	0	0
7:45 AM	0	1	121	61	0	11	90	8	0	26	10	3	0	63	39	1	434	1,415	0	0	0	0
8:00 AM	0	1	101	58	0	15	70	6	0	5	5	9	0	54	47	5	376	1,196	0	0	0	0
8:15 AM	0	2	98	48	0	10	79	8	0	12	2	5	0	40	33	3	340		0	0	0	0
8:30 AM	0	6	85	40	0	4	61	5	0	5	3	5	0	32	14	5	265		0	0	0	0
8:45 AM	0	4	65	34	0	5	50	7	0	8	3	3	0	18	15	3	215		0	0	0	0
Count Total	0	25	911	448	0	94	693	57	0	83	41	51	0	407	276	41	3,127		0	0	0	0
Peak Hour	0	12	562	268	0	60	433	31	0	53	28	29	0	263	167	25	1,931		0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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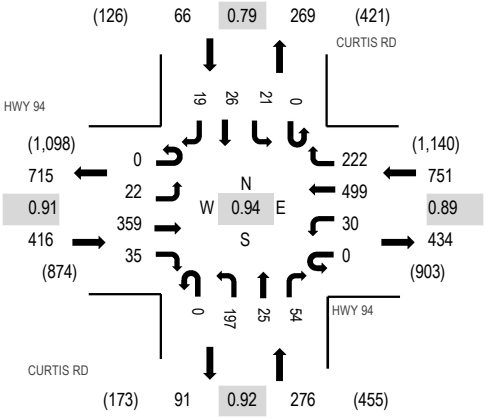
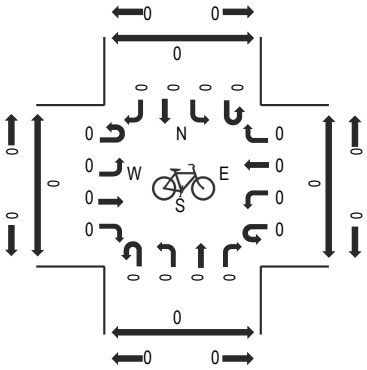
Location: 5 CURTIS RD & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

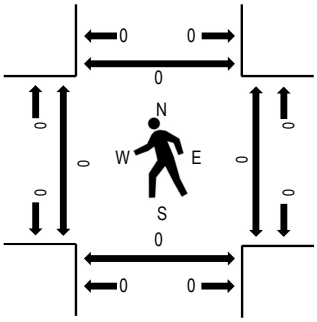
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

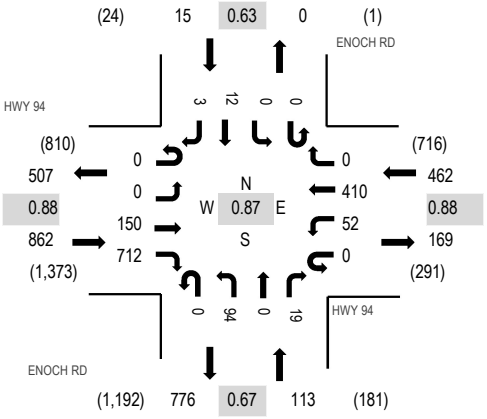
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				CURTIS RD Northbound				CURTIS RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	6	88	9	0	3	141	56	0	56	6	12	0	5	6	6	394	1,509	0	0	0	0
4:15 PM	0	3	95	5	0	8	113	64	0	58	3	14	0	8	7	6	384	1,403	0	0	0	0
4:30 PM	0	6	96	12	0	12	137	61	0	49	8	15	0	1	5	1	403	1,303	0	0	0	0
4:45 PM	0	7	80	9	0	7	108	41	0	34	8	13	0	7	8	6	328	1,165	0	0	0	0
5:00 PM	0	9	99	18	0	6	66	26	0	27	9	12	0	4	4	8	288	1,086	0	0	0	0
5:15 PM	0	4	101	9	0	10	73	26	0	34	4	8	0	7	7	1	284		0	0	0	0
5:30 PM	0	4	102	7	0	7	68	26	0	19	13	10	0	6	2	1	265		0	0	0	0
5:45 PM	0	6	95	4	0	1	66	14	0	17	11	15	0	10	7	3	249		0	0	0	0
Count Total	0	45	756	73	0	54	772	314	0	294	62	99	0	48	46	32	2,595		0	0	0	0
Peak Hour	0	22	359	35	0	30	499	222	0	197	25	54	0	21	26	19	1,509		0	0	0	0

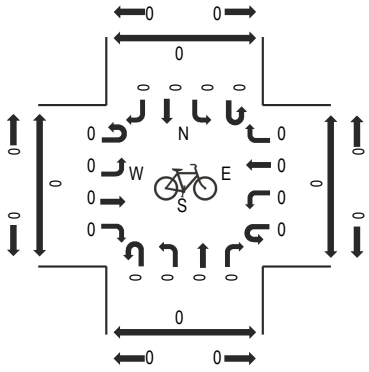
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 ENOCH RD & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

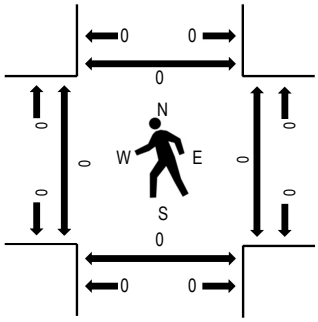
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

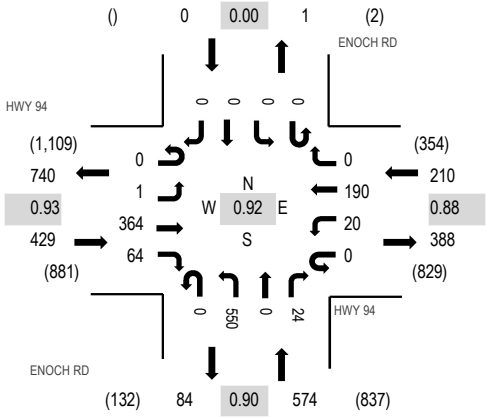
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				ENOCH RD Northbound				ENOCH RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	50	154	0	16	116	0	0	30	0	2	0	0	0	2	370	1,452	0	0	0	0
7:15 AM	0	0	48	198	0	12	117	0	0	29	0	13	0	0	0	0	417	1,351	0	0	0	0
7:30 AM	0	0	29	193	0	8	93	0	0	11	0	3	0	0	7	1	345	1,169	0	0	0	0
7:45 AM	0	0	23	167	0	16	84	0	0	24	0	1	0	0	5	0	320	1,010	0	0	0	0
8:00 AM	0	0	25	139	0	7	74	0	0	17	0	1	0	0	6	0	269	842	0	0	0	0
8:15 AM	0	0	34	111	0	5	64	0	0	20	0	0	0	0	1	0	235		0	0	0	0
8:30 AM	0	1	28	86	0	0	51	0	0	18	0	2	0	0	0	0	186		0	0	0	0
8:45 AM	0	0	32	55	0	4	49	0	0	10	0	0	0	0	2	0	152		0	0	0	0
Count Total	0	1	269	1,103	0	68	648	0	0	159	0	22	0	0	21	3	2,294		0	0	0	0
Peak Hour	0	0	150	712	0	52	410	0	0	94	0	19	0	0	12	3	1,452		0	0	0	0

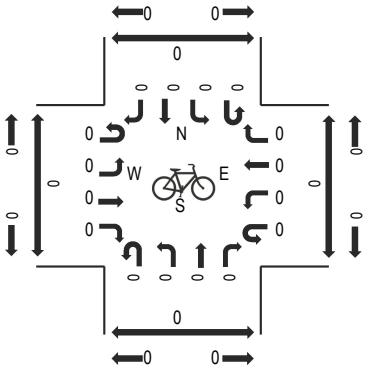
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 ENOCH RD & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

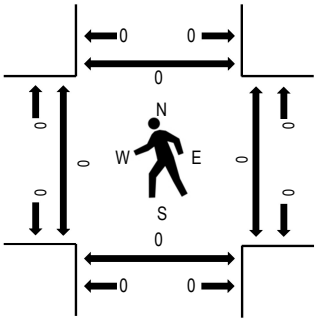
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

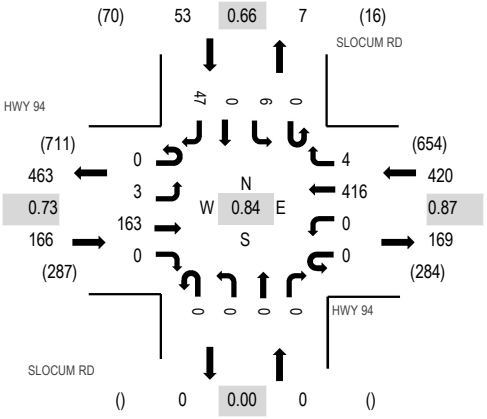
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				ENOCH RD Northbound				ENOCH RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	88	13	0	4	43	0	0	158	0	1	0	0	0	0	307	1,213	0	0	0	0
4:15 PM	0	1	90	17	0	13	43	0	0	139	0	10	0	0	0	0	313	1,124	0	0	0	0
4:30 PM	0	0	97	15	0	2	58	0	0	148	0	8	0	0	0	0	328	1,039	0	0	0	0
4:45 PM	0	0	89	19	0	1	46	0	0	105	0	5	0	0	0	0	265	928	0	0	0	0
5:00 PM	0	0	102	6	0	3	27	0	0	71	0	9	0	0	0	0	218	859	0	0	0	0
5:15 PM	0	0	97	14	0	1	44	0	0	65	0	7	0	0	0	0	228		0	0	0	0
5:30 PM	0	0	113	9	0	0	37	0	0	54	0	4	0	0	0	0	217		0	0	0	0
5:45 PM	0	0	98	13	0	2	29	1	0	42	0	11	0	0	0	0	196		0	0	0	0
Count Total	0	1	774	106	0	26	327	1	0	782	0	55	0	0	0	0	2,072		0	0	0	0
Peak Hour	0	1	364	64	0	20	190	0	0	550	0	24	0	0	0	0	1,213		0	0	0	0

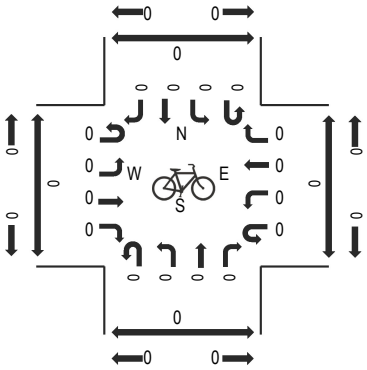
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 SLOCUM RD & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

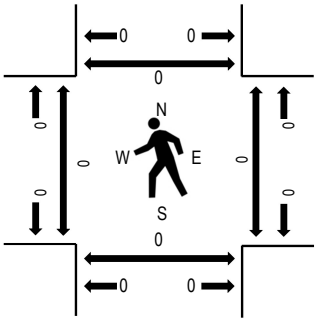
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

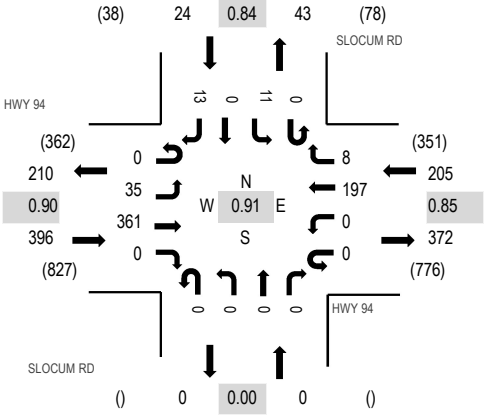
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				SLOCUM RD Northbound				SLOCUM RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	1	49	0	0	0	120	1	0	0	0	0	0	1	0	19	191	639	0	0	0	0
7:15 AM	0	1	56	0	0	0	112	1	0	0	0	0	0	3	0	13	186	553	0	0	0	0
7:30 AM	0	1	35	0	0	0	85	1	0	0	0	0	0	1	0	8	131	475	0	0	0	0
7:45 AM	0	0	23	0	0	0	99	1	0	0	0	0	0	1	0	7	131	423	0	0	0	0
8:00 AM	0	1	27	0	0	0	72	1	0	0	0	0	0	0	0	4	105	372	0	0	0	0
8:15 AM	0	2	32	0	0	0	68	1	0	0	0	0	0	0	0	5	108		0	0	0	0
8:30 AM	0	3	28	0	0	0	42	0	0	0	0	0	0	0	0	6	79		0	0	0	0
8:45 AM	0	0	28	0	0	0	49	1	0	0	0	0	0	0	0	2	80		0	0	0	0
Count Total	0	9	278	0	0	0	647	7	0	0	0	0	0	6	0	64	1,011		0	0	0	0
Peak Hour	0	3	163	0	0	0	416	4	0	0	0	0	0	6	0	47	639		0	0	0	0

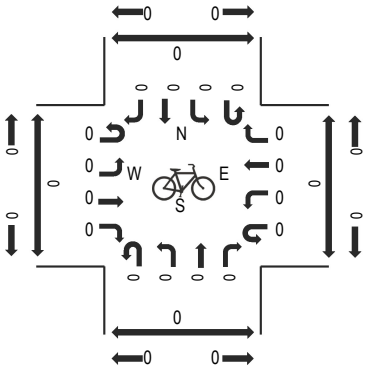
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 SLOCUM RD & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

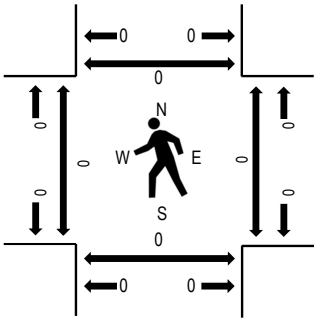
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

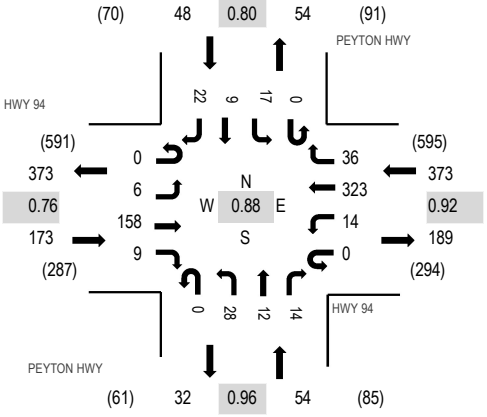
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				SLOCUM RD Northbound				SLOCUM RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	9	84	0	0	0	51	3	0	0	0	0	0	2	0	0	149	625	0	0	0	0
4:15 PM	0	12	92	0	0	0	57	3	0	0	0	0	0	4	0	4	172	621	0	0	0	0
4:30 PM	0	11	90	0	0	0	49	1	0	0	0	0	0	2	0	6	159	593	0	0	0	0
4:45 PM	0	3	95	0	0	0	40	1	0	0	0	0	0	3	0	3	145	597	0	0	0	0
5:00 PM	0	8	105	0	0	0	26	1	0	0	0	0	0	3	0	2	145	591	0	0	0	0
5:15 PM	0	9	85	0	0	0	49	1	0	0	0	0	0	0	0	0	144		0	0	0	0
5:30 PM	0	5	115	0	0	0	36	0	0	0	0	0	0	2	0	5	163		0	0	0	0
5:45 PM	0	10	94	0	0	0	32	1	0	0	0	0	0	0	0	2	139		0	0	0	0
Count Total	0	67	760	0	0	0	340	11	0	0	0	0	0	16	0	22	1,216		0	0	0	0
Peak Hour	0	35	361	0	0	0	197	8	0	0	0	0	0	11	0	13	625		0	0	0	0

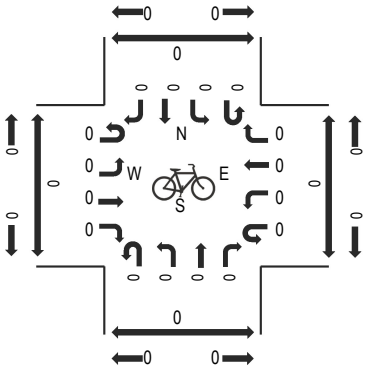
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 8 PEYTON HWY & HWY 94 AM
Date: Thursday, December 5, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

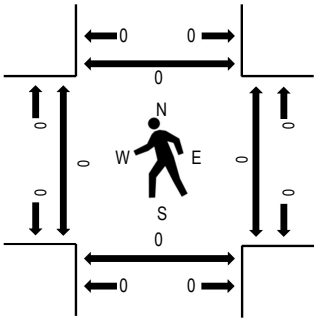
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

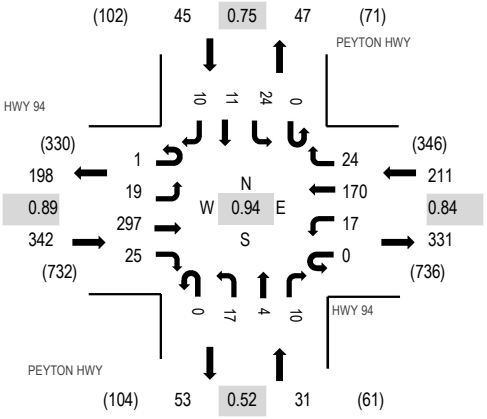
Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	42	7	0	3	87	8	0	10	2	2	0	2	3	7	175	648	0	0	0	0
7:15 AM	0	0	57	0	0	4	88	9	0	4	4	6	0	6	0	6	184	593	0	0	0	0
7:30 AM	0	1	36	2	0	1	76	11	0	8	2	3	0	7	5	3	155	515	0	0	0	0
7:45 AM	0	3	23	0	0	6	72	8	0	6	4	3	0	2	1	6	134	438	0	0	0	0
8:00 AM	0	2	24	3	0	1	59	10	0	9	4	1	0	1	1	5	120	389	0	0	0	0
8:15 AM	0	1	24	5	0	4	60	4	0	1	3	1	0	1	1	1	106		0	0	0	0
8:30 AM	0	0	22	9	0	1	33	4	0	2	1	1	1	3	0	1	78		0	0	0	0
8:45 AM	0	1	22	1	0	2	42	2	0	4	4	0	0	5	1	1	85		0	0	0	0
Count Total	0	10	250	27	0	22	517	56	0	44	24	17	1	27	12	30	1,037		0	0	0	0
Peak Hour	0	6	158	9	0	14	323	36	0	28	12	14	0	17	9	22	648		0	0	0	0

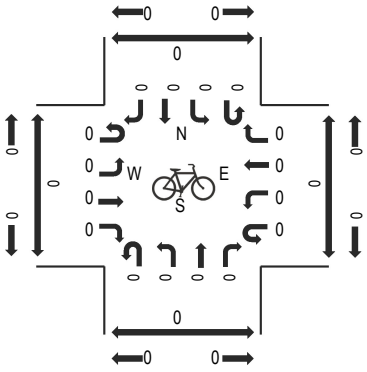
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 8 PEYTON HWY & HWY 94 PM
Date: Thursday, December 5, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

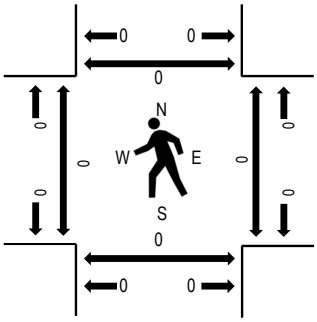
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HWY 94 Eastbound				HWY 94 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	1	5	66	5	0	3	49	11	0	9	1	5	0	7	1	1	164	629	0	0	0	0
4:15 PM	0	4	76	7	0	8	49	6	0	1	1	2	0	6	4	3	167	626	0	0	0	0
4:30 PM	0	6	78	6	0	2	41	7	0	5	1	1	0	6	3	5	161	612	0	0	0	0
4:45 PM	0	4	77	7	0	4	31	0	0	2	1	2	0	5	3	1	137	608	0	0	0	0
5:00 PM	0	0	99	4	0	3	24	7	0	3	0	2	0	11	4	4	161	612	0	0	0	0
5:15 PM	0	3	72	5	0	10	38	4	0	5	1	2	0	10	3	0	153		0	0	0	0
5:30 PM	0	4	98	8	0	1	26	1	0	4	1	3	0	6	3	2	157		0	0	0	0
5:45 PM	0	1	89	7	0	1	20	0	0	4	2	3	0	10	2	2	141		0	0	0	0
Count Total	1	27	655	49	0	32	278	36	0	33	8	20	0	61	23	18	1,241		0	0	0	0
Peak Hour	1	19	297	25	0	17	170	24	0	17	4	10	0	24	11	10	629		0	0	0	0

All Traffic Data Services
12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Site Code: 9
Station ID: 9
ENOCH RD S.O. HWY 94

Start Time	05-Dec-24 Thu	NB	SB							Total
12:00 AM		15	15							30
01:00		6	8							14
02:00		8	4							12
03:00		7	23							30
04:00		20	96							116
05:00		57	402							459
06:00		82	610							692
07:00		113	**776**							**889**
08:00		68	416							484
09:00		71	165							236
10:00		119	95							214
11:00		**120**	104							224
12:00 PM		172	**110**							282
01:00		190	75							265
02:00		424	74							498
03:00		**733**	61							**794**
04:00		574	84							658
05:00		263	48							311
06:00		143	45							188
07:00		50	53							103
08:00		24	80							104
09:00		19	88							107
10:00		42	41							83
11:00		23	10							33
Total		3343	3483							6826
Percent		49.0%	51.0%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	120	776	-	-	-	-	-	-	889
PM Peak	-	15:00	12:00	-	-	-	-	-	-	15:00
Vol.	-	733	110	-	-	-	-	-	-	794
Grand Total		3343	3483							6826
Percent		49.0%	51.0%							
ADT		ADT 6,826		AADT 6,826						

All Traffic Data Services
12200 W 52nd Ave
Wheat Ridge, CO 80033
www.alltrafficdata.net

Site Code: 10
Station ID: 10
HWY 94 W.O. SLOCUM RD

Start Time	05-Dec-24 Thu	EB	WB							Total
12:00 AM		13	4							17
01:00		11	3							14
02:00		7	9							16
03:00		6	21							27
04:00		4	51							55
05:00		21	211							232
06:00		78	444							522
07:00		**169**	**462**							**631**
08:00		122	254							376
09:00		105	205							310
10:00		104	203							307
11:00		140	193							333
12:00 PM		137	160							297
01:00		166	151							317
02:00		207	137							344
03:00		324	165							489
04:00		388	**210**							**598**
05:00		**441**	144							585
06:00		260	117							377
07:00		167	74							241
08:00		142	61							203
09:00		88	36							124
10:00		56	13							69
11:00		36	15							51
Total		3192	3343							6535
Percent		48.8%	51.2%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	169	462	-	-	-	-	-	-	631
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	441	210	-	-	-	-	-	-	598
Grand Total		3192	3343							6535
Percent		48.8%	51.2%							
ADT		ADT 6,535		AADT 6,535						

APPENDIX B

Level of Service Definitions

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 19 – Signalized Intersections.

Motorized Vehicle Level of Service (LOS) for Signalized Intersections

Levels of service are defined to represent reasonable ranges in control delay.

LOS A Describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B Describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C Describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D Describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E Describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
≤ 10	A	F
> 10 – 20	B	F
> 20 – 35	C	F
> 35 – 55	D	F
> 55 – 80	E	F
> 80	F	F

Note: [a] For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 7th Edition, Transportation Research Board, 2022: Chapter 20 – Two-Way Stop-Controlled Intersections, Chapter 21 – All-Way Stop-Controlled Intersections, and Chapter 22 - Roundabouts.

Motorized Vehicle Level of Service (LOS) for Unsignalized & Roundabout Intersections

LOS is a quantitative stratification of performance measure(s) representing quality of service. Quality of service describes how well a transportation facility or service operates from a traveler's perspective. LOS is measured on an A – F scale, with LOS A representing the best operating conditions from a traveler's perspective.

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	$v/c \leq 1.0$	$v/c > 1.0$
0 – 10	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

[a] For approaches and intersectionwide assessment, LOS is defined solely by control delay.

APPENDIX C

Capacity Worksheets

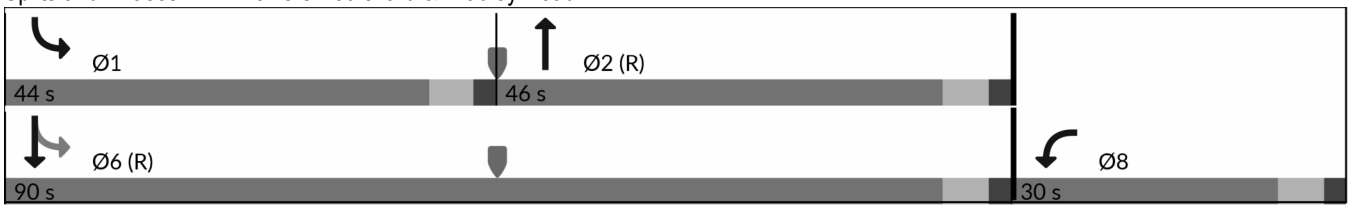
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	353	561	597	334	376	247
Future Volume (vph)	353	561	597	334	376	247
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.336	
Satd. Flow (perm)	3433	1583	3539	1583	626	3539
Satd. Flow (RTOR)		610		363		
Lane Group Flow (vph)	384	610	649	363	409	268
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	30.0		46.0		44.0	90.0
Total Split (%)	25.0%		38.3%		36.7%	75.0%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	18.6	120.0	67.0	120.0	89.4	89.4
Actuated g/C Ratio	0.16	1.00	0.56	1.00	0.75	0.75
v/c Ratio	0.72	0.38	0.32	0.22	0.65	0.10
Control Delay (s/veh)	56.0	0.7	16.4	0.3	10.9	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.0	0.7	16.4	0.3	10.9	4.6
LOS	E	A	B	A	B	A
Approach Delay (s/veh)	22.1		10.7			8.4
Approach LOS	C		B			A
Queue Length 50th (ft)	147	0	131	0	91	26
Queue Length 95th (ft)	192	0	231	0	155	44
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	686	1583	1975	1583	828	2636
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	0.56	0.39	0.33	0.23	0.49	0.10

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	514	232	276	4	93	98	442	1042	0	514	529	638
Future Volume (vph)	514	232	276	4	93	98	442	1042	0	514	529	638
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			300			245						693
Lane Group Flow (vph)	559	252	300	4	101	107	480	1133	0	559	575	693
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		30.0	51.0		29.0	50.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		25.0%	42.5%		24.2%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	22.3	31.4	120.0	5.0	5.4	120.0	21.2	46.1		22.3	47.1	120.0
Actuated g/C Ratio	0.19	0.26	1.00	0.04	0.05	1.00	0.18	0.38		0.19	0.39	1.00
v/c Ratio	0.87	0.27	0.18	0.05	0.63	0.06	0.79	0.83		0.87	0.41	0.43
Control Delay (s/veh)	63.6	36.9	0.2	57.0	75.0	0.0	57.1	40.3		63.6	28.1	0.8
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 (s/veh)	63.6	36.9	0.2	57.0	75.0	0.0	57.1	40.3		63.6	28.1	0.8
LOS	E	D	A	E	E	A	E	D		E	C	A
Approach Delay (s/veh)		40.5			36.9			45.4			28.7	
Approach LOS		D			D			D			C	
Queue Length 50th (ft)	217	79	0	3	41	0	184	420		217	170	0
Queue Length 95th (ft)	#304	131	0	15	#84	0	238	513		#304	227	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	927	1583	73	158	1583	686	1359		657	1389	1583
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	0.85	0.27	0.19	0.05	0.64	0.07	0.70	0.83		0.85	0.41	0.44

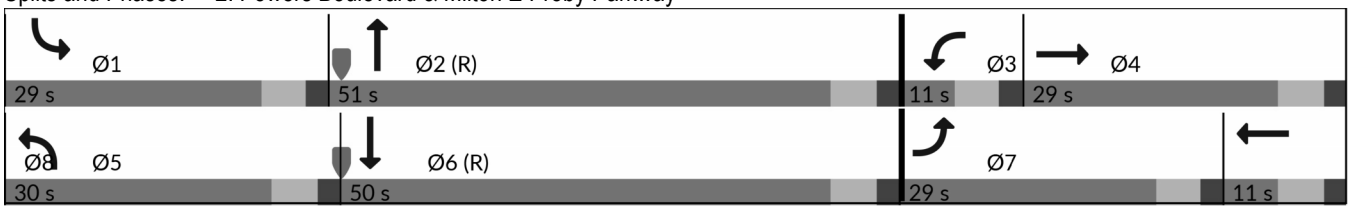
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 37.4	Intersection LOS: D
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	71	182	351	31	1	130	696	508	11	1586	42
Future Volume (vph)	20	71	182	351	31	1	130	696	508	11	1586	42
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			552			245
Lane Group Flow (vph)	22	77	198	382	34	1	141	757	552	12	1724	46
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	12.0		20.0	21.0		17.0	77.0		11.0	71.0	
Total Split (%)	9.2%	10.0%		16.7%	17.5%		14.2%	64.2%		9.2%	59.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	6.0	120.0	14.0	19.4	120.0	11.0	77.6	120.0	5.0	65.0	120.0
Actuated g/C Ratio	0.04	0.05	1.00	0.12	0.16	1.00	0.09	0.65	1.00	0.04	0.54	1.00
v/c Ratio	0.15	0.82	0.12	0.95	0.05	0.00	0.87	0.33	0.34	0.16	0.89	0.02
Control Delay (s/veh)	58.0	111.6	0.1	117.3	56.0	0.0	97.3	10.6	0.6	60.7	32.4	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	0.0
Total Delay (s/veh)	58.0	111.6	0.1	117.3	56.0	0.0	97.3	10.6	0.6	60.7	32.4	0.0
LOS	E	F	A	F	E	A	F	B	A	E	C	A
Approach Delay (s/veh)		33.4			112.1			15.2			31.8	
Approach LOS		C			F			B			C	
Queue Length 50th (ft)	8	60	0	163	8	0	110	112	0	9	602	0
Queue Length 95th (ft)	23	#151	0	#259	m19	m0	#229	191	0	30	724	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	93	1583	400	572	1583	162	2288	1583	73	1916	1583
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	0.15	0.83	0.13	0.96	0.06	0.00	0.87	0.33	0.35	0.16	0.90	0.03

Intersection Summary

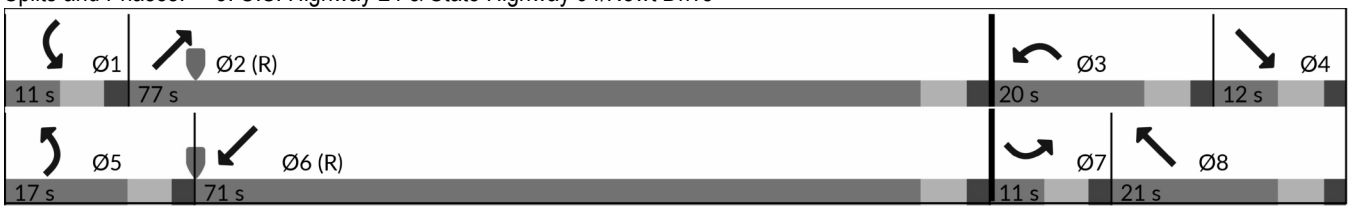
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 34.3	Intersection LOS: C
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	416	159	52	314	136	74	567	67	342	1292	2
Future Volume (vph)	1	416	159	52	314	136	74	567	67	342	1292	2
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.318			0.154			0.114			0.304		
Satd. Flow (perm)	592	1863	1583	287	1863	1583	212	3539	1583	566	3539	1583
Satd. Flow (RTOR)			132			148			136			82
Lane Group Flow (vph)	1	452	173	57	341	148	80	616	73	372	1404	2
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	44.0	44.0	44.0	44.0	44.0	44.0	12.0	44.0	44.0	32.0	64.0	64.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	10.0%	36.7%	36.7%	26.7%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	33.3	33.3	33.3	33.3	33.3	33.3	56.9	51.0	51.0	74.7	65.1	65.1
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.28	0.47	0.43	0.43	0.62	0.54	0.54
v/c Ratio	0.00	0.87	0.32	0.72	0.66	0.27	0.43	0.40	0.09	0.69	0.73	0.00
Control Delay (s/veh)	30.0	58.7	11.0	84.3	44.3	6.0	23.2	27.1	0.2	19.1	25.4	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	0.0
Total Delay (s/veh)	30.0	58.7	11.0	84.3	44.3	6.0	23.2	27.1	0.2	19.1	25.4	0.0
LOS	C	E	B	F	D	A	C	C	A	B	C	A
Approach Delay (s/veh)		45.5			38.2			24.1			24.1	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	1	339	30	39	231	0	23	173	0	132	455	0
Queue Length 95th (ft)	m1	m448	m82	#109	319	47	57	265	0	207	571	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	187	589	591	90	589	602	184	1504	751	613	1921	896
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	0.01	0.77	0.29	0.63	0.58	0.25	0.43	0.41	0.10	0.61	0.73	0.00

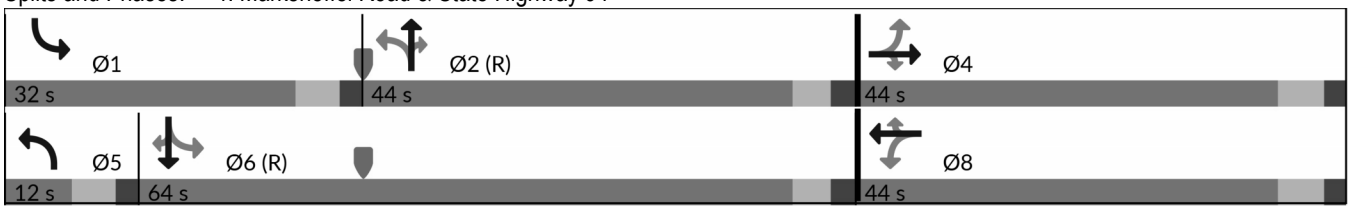
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 29.8	Intersection LOS: C
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	562	268	60	433	31	53	28	29	263	167	25
Future Volume (vph)	12	562	268	60	433	31	53	28	29	263	167	25
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.429			0.281			0.554			0.738		
Satd. Flow (perm)	799	1863	1583	523	1863	1583	1032	1863	1583	1375	1863	1583
Satd. Flow (RTOR)			291			82			82			82
Lane Group Flow (vph)	13	611	291	65	471	34	58	30	32	286	182	27
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	64.0	64.0	11.0	64.0	64.0	45.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	9.2%	53.3%	53.3%	9.2%	53.3%	53.3%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	72.4	67.9	67.9	75.9	73.4	73.4	30.0	30.0	30.0	30.0	30.0	30.0
Actuated g/C Ratio	0.60	0.57	0.57	0.63	0.61	0.61	0.25	0.25	0.25	0.25	0.25	0.25
v/c Ratio	0.02	0.57	0.28	0.16	0.41	0.03	0.22	0.06	0.07	0.83	0.39	0.05
Control Delay (s/veh)	10.0	22.0	2.6	12.5	18.7	2.1	35.3	31.2	0.3	62.1	38.4	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 (s/veh)	10.0	22.0	2.6	12.5	18.7	2.1	35.3	31.2	0.3	62.1	38.4	0.2
LOS	A	C	A	B	B	A	D	C	A	E	D	A
Approach Delay (s/veh)		15.7			17.1			25.0			50.1	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)	3	313	0	21	175	0	36	18	0	210	117	0
Queue Length 95th (ft)	13	489	46	43	403	6	67	39	0	288	167	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	527	1054	1022	397	1138	999	335	605	569	446	605	569
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	0.02	0.58	0.28	0.16	0.41	0.03	0.17	0.05	0.06	0.64	0.30	0.05

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 24.7	Intersection LOS: C
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Curtis Road & State Highway 94

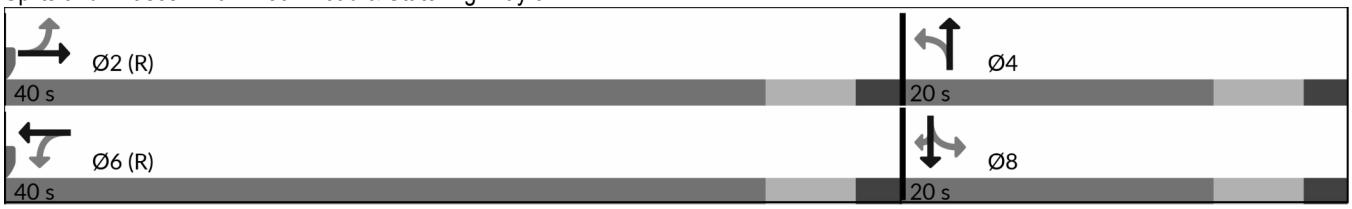
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	150	712	52	410	0	94	0	19	0	12	3
Future Volume (vph)	0	150	712	52	410	0	94	0	19	0	12	3
Satd. Flow (prot)	1863	1863	1583	1770	1863	0	0	1770	1583	0	1863	1583
Flt Permitted				0.654				0.749				
Satd. Flow (perm)	1863	1863	1583	1218	1863	0	0	1395	1583	0	1863	1583
Satd. Flow (RTOR)			774						164			55
Lane Group Flow (vph)	0	163	774	57	446	0	0	102	21	0	13	3
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	40.0	40.0		40.0	40.0		20.0	20.0		20.0	20.0	20.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		41.9	60.0	41.9	41.9			9.6	60.0		9.6	9.6
Actuated g/C Ratio		0.70	1.00	0.70	0.70			0.16	1.00		0.16	0.16
v/c Ratio		0.12	0.48	0.06	0.34			0.45	0.01		0.04	0.01
Control Delay (s/veh)		2.5	0.9	5.3	6.4			28.5	0.0		19.5	0.0
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.5	0.9	5.3	6.4			28.5	0.0		19.5	0.0
LOS		A	A	A	A			C	A		B	A
Approach Delay (s/veh)		1.2			6.3			23.6			15.9	
Approach LOS		A			A			C			B	
Queue Length 50th (ft)		13	0	7	63			34	0		4	0
Queue Length 95th (ft)		35	0	21	135			69	0		15	0
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)			600	190					340			100
Base Capacity (vph)		1300	1583	850	1300			325	1583		434	411
Starvation Cap Reductn		0	0	0	0			0	0		0	0
Spillback Cap Reductn		0	0	0	0			0	0		0	0
Storage Cap Reductn		0	0	0	0			0	0		0	0
Reduced v/c Ratio		0.13	0.49	0.07	0.34			0.31	0.01		0.03	0.01

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay (s/veh): 4.7	Intersection LOS: A
Intersection Capacity Utilization 52.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	163	416	4	6	47
Future Vol, veh/h	3	163	416	4	6	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	177	452	4	7	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	457	0	-	0	638	454
Stage 1	-	-	-	-	454	-
Stage 2	-	-	-	-	184	-
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	1104	-	-	-	441	606
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1104	-	-	-	439	606
Mov Cap-2 Maneuver	-	-	-	-	439	-
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	848	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	11.88
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	33	-	-	-	581
HCM Lane V/C Ratio	0.003	-	-	-	0.099
HCM Control Delay (s/veh)	8.3	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	169	373	0	0	1
Future Vol, veh/h	0	169	373	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	184	405	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	405	0	-	0	589	405
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	184	-
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	1153	-	-	-	471	645
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1153	-	-	-	471	645
Mov Cap-2 Maneuver	-	-	-	-	471	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	848	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.59
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1153	-	-	-	645
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s/veh)	0	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	158	9	14	323	36	28	12	14	17	9	22
Future Vol, veh/h	6	158	9	14	323	36	28	12	14	17	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	172	10	15	351	39	30	13	15	18	10	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	182	0	0	576	610	177	592	596	371
Stage 1	-	-	-	-	-	-	190	190	-	401	401	-
Stage 2	-	-	-	-	-	-	386	421	-	191	195	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1168	-	-	1394	-	-	428	409	866	418	417	675
Stage 1	-	-	-	-	-	-	812	743	-	625	601	-
Stage 2	-	-	-	-	-	-	637	589	-	810	740	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1168	-	-	1394	-	-	397	402	866	391	410	675
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	402	-	391	410	-
Stage 1	-	-	-	-	-	-	808	739	-	619	594	-
Stage 2	-	-	-	-	-	-	598	583	-	778	736	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.28	0.29	13.89	13.23
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	463	1168	-	-	1394	-	-	490
HCM Lane V/C Ratio	0.127	0.006	-	-	0.011	-	-	0.107
HCM Control Delay (s/veh)	13.9	8.1	-	-	7.6	-	-	13.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.4

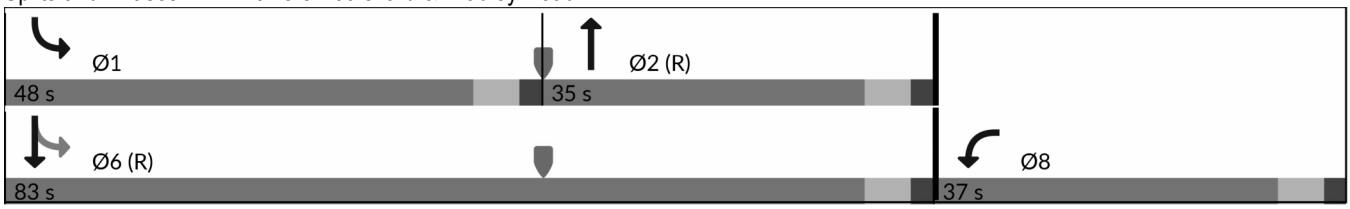
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	368	403	312	523	346	631
Future Volume (vph)	368	403	312	523	346	631
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.504	
Satd. Flow (perm)	3433	1583	3539	1583	939	3539
Satd. Flow (RTOR)		438		568		
Lane Group Flow (vph)	400	438	339	568	376	686
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	37.0		35.0		48.0	83.0
Total Split (%)	30.8%		29.2%		40.0%	69.2%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	19.3	120.0	68.4	120.0	88.7	88.7
Actuated g/C Ratio	0.16	1.00	0.57	1.00	0.74	0.74
v/c Ratio	0.72	0.27	0.16	0.35	0.47	0.26
Control Delay (s/veh)	55.5	0.4	13.7	0.6	7.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.5	0.4	13.7	0.6	7.7	5.6
LOS	E	A	B	A	A	A
Approach Delay (s/veh)	26.7		5.5			6.4
Approach LOS	C		A			A
Queue Length 50th (ft)	153	0	62	0	84	78
Queue Length 95th (ft)	197	0	107	0	144	119
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	886	1583	2016	1583	985	2616
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	0.45	0.28	0.17	0.36	0.38	0.26

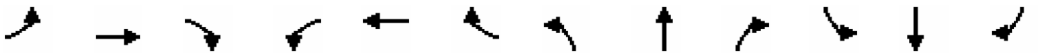
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 53.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Powers Boulevard & Bradley Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	561	111	426	16	197	339	283	609	10	152	968	503
Future Volume (vph)	561	111	426	16	197	339	283	609	10	152	968	503
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			463			330			245			415
Lane Group Flow (vph)	610	121	463	17	214	368	308	662	11	165	1052	547
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	33.0	38.0		11.0	16.0		21.0	55.0		16.0	50.0	
Total Split (%)	27.5%	31.7%		9.2%	13.3%		17.5%	45.8%		13.3%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	36.8	120.0	5.0	10.2	120.0	14.2	51.2	120.0	9.6	46.5	120.0
Actuated g/C Ratio	0.21	0.31	1.00	0.04	0.09	1.00	0.12	0.43	1.00	0.08	0.39	1.00
v/c Ratio	0.85	0.11	0.29	0.23	0.71	0.23	0.75	0.43	0.00	0.60	0.76	0.34
Control Delay (s/veh)	58.0	31.0	0.4	63.5	67.0	0.3	63.7	25.9	0.0	63.0	37.2	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 (s/veh)	58.0	31.0	0.4	63.5	67.0	0.3	63.7	25.9	0.0	63.0	37.2	0.5
LOS	E	C	A	E	E	A	E	C	A	E	D	A
Approach Delay (s/veh)		33.0			26.0			37.5			28.3	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	232	32	0	13	86	0	120	193	0	64	383	0
Queue Length 95th (ft)	298	62	0	38	#138	0	169	247	0	101	470	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	772	1086	1583	73	305	1583	429	1510	1583	286	1372	1583
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	0.79	0.11	0.29	0.23	0.70	0.23	0.72	0.44	0.01	0.58	0.77	0.35

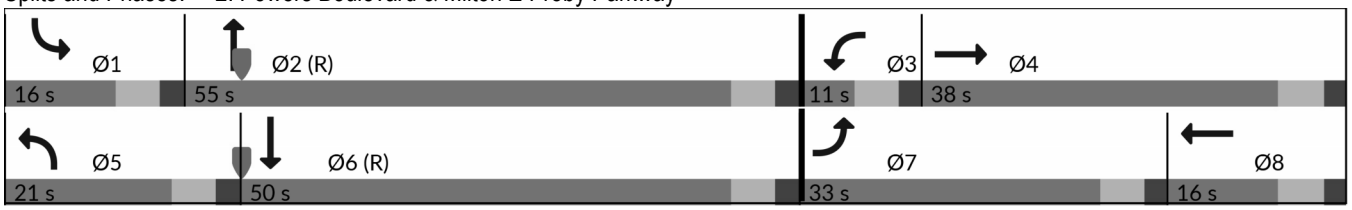
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 31.2	Intersection LOS: C
Intersection Capacity Utilization 76.3%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	27	42	166	315	45	6	179	1654	391	10	992	28
Future Volume (vph)	27	42	166	315	45	6	179	1654	391	10	992	28
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			300			300			375			300
Lane Group Flow (vph)	29	46	180	342	49	7	195	1798	425	11	1078	30
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	12.0		22.0	23.0		28.0	75.0		11.0	58.0	
Total Split (%)	9.2%	10.0%		18.3%	19.2%		23.3%	62.5%		9.2%	48.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	6.0	120.0	15.2	18.4	120.0	17.8	80.8	120.0	5.1	59.2	120.0
Actuated g/C Ratio	0.04	0.05	1.00	0.13	0.15	1.00	0.15	0.67	1.00	0.04	0.49	1.00
v/c Ratio	0.20	0.49	0.11	0.78	0.09	0.00	0.74	0.75	0.26	0.14	0.61	0.01
Control Delay (s/veh)	59.0	73.6	0.1	75.4	65.1	0.0	65.6	17.3	0.4	60.0	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	0.0
Total Delay (s/veh)	59.0	73.6	0.1	75.4	65.1	0.0	65.6	17.3	0.4	60.0	25.7	0.0
LOS	E	E	A	E	E	A	E	B	A	E	C	A
Approach Delay (s/veh)		20.1			72.9			18.3			25.4	
Approach LOS		C			E			B			C	
Queue Length 50th (ft)	11	35	0	143	20	0	146	454	0	8	331	0
Queue Length 95th (ft)	27	#80	0	#195	m35	m0	221	725	0	29	431	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	95	1583	457	566	1583	324	2384	1583	75	1746	1583
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	0.48	0.11	0.75	0.09	0.00	0.60	0.75	0.27	0.15	0.62	0.02

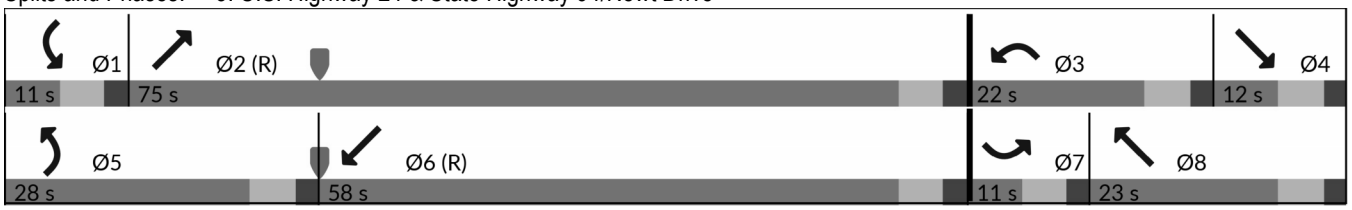
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 25.5	Intersection LOS: C
Intersection Capacity Utilization 80.5%	ICU Level of Service D
Analysis Period (min) 15	

\# 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	296	140	89	333	345	91	1034	28	136	605	12
Future Volume (vph)	2	296	140	89	333	345	91	1034	28	136	605	12
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.230			0.299			0.369			0.162		
Satd. Flow (perm)	428	1863	1583	557	1863	1583	687	3539	1583	302	3539	1583
Satd. Flow (RTOR)			152			127			82			82
Lane Group Flow (vph)	2	322	152	97	362	375	99	1124	30	148	658	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	44.0	44.0	44.0	44.0	44.0	44.0	11.0	59.0	59.0	17.0	65.0	65.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	9.2%	49.2%	49.2%	14.2%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	29.2	29.2	29.2	29.2	29.2	29.2	70.7	64.3	64.3	74.9	66.4	66.4
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24	0.24	0.59	0.54	0.54	0.62	0.55	0.55
v/c Ratio	0.01	0.71	0.30	0.71	0.80	0.78	0.21	0.59	0.03	0.49	0.33	0.01
Control Delay (s/veh)	35.5	52.2	9.2	69.0	55.7	38.7	10.4	22.0	0.0	14.8	16.2	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	0.0
Total Delay (s/veh)	35.5	52.2	9.2	69.0	55.7	38.7	10.4	22.0	0.0	14.8	16.2	0.0
LOS	D	D	A	E	E	D	B	C	A	B	B	A
Approach Delay (s/veh)		38.4			49.6			20.6			15.8	
Approach LOS		D			D			C			B	
Queue Length 50th (ft)	1	235	0	69	264	184	26	302	0	40	144	0
Queue Length 95th (ft)	m4	310	56	126	341	274	58	445	0	82	205	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	135	589	605	176	589	588	467	1895	885	327	1957	912
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	0.01	0.55	0.25	0.55	0.61	0.64	0.21	0.59	0.03	0.45	0.34	0.01

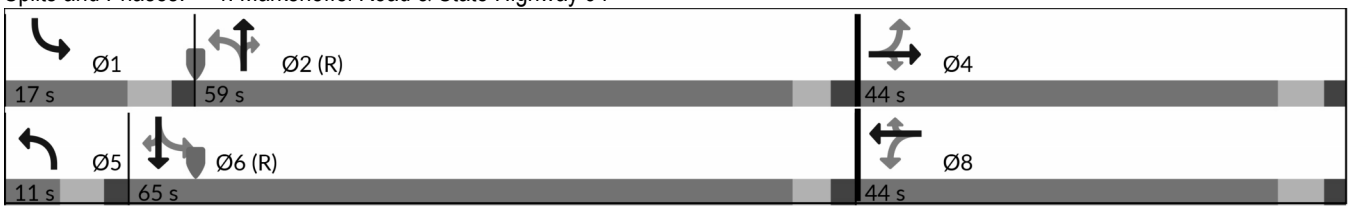
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 29.1	Intersection LOS: C
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	359	35	30	499	222	197	25	54	21	26	19
Future Volume (vph)	22	359	35	30	499	222	197	25	54	21	26	19
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.375			0.481			0.739			0.740		
Satd. Flow (perm)	699	1863	1583	896	1863	1583	1377	1863	1583	1378	1863	1583
Satd. Flow (RTOR)			82			241			82			82
Lane Group Flow (vph)	24	390	38	33	542	241	214	27	59	23	28	21
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	55.0	55.0	11.0	55.0	55.0	54.0	54.0	54.0	54.0	54.0	54.0
Total Split (%)	9.2%	45.8%	45.8%	9.2%	45.8%	45.8%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	79.8	75.9	75.9	80.1	76.1	76.1	24.5	24.5	24.5	24.5	24.5	24.5
Actuated g/C Ratio	0.67	0.63	0.63	0.67	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.20
v/c Ratio	0.04	0.33	0.03	0.05	0.45	0.22	0.76	0.07	0.15	0.08	0.07	0.05
Control Delay (s/veh)	7.7	13.6	0.0	6.9	11.0	2.0	61.7	35.5	4.1	35.7	35.5	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 (s/veh)	7.7	13.6	0.0	6.9	11.0	2.0	61.7	35.5	4.1	35.7	35.5	0.2
LOS	A	B	A	A	B	A	E	D	A	D	D	A
Approach Delay (s/veh)		12.2			8.2			48.0			25.3	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)	5	146	0	6	127	9	158	17	0	15	18	0
Queue Length 95th (ft)	18	260	1	m14	268	m23	224	39	19	34	39	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	519	1178	1031	643	1181	1091	550	745	682	551	745	682
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	0.05	0.33	0.04	0.05	0.46	0.22	0.39	0.04	0.09	0.04	0.04	0.03

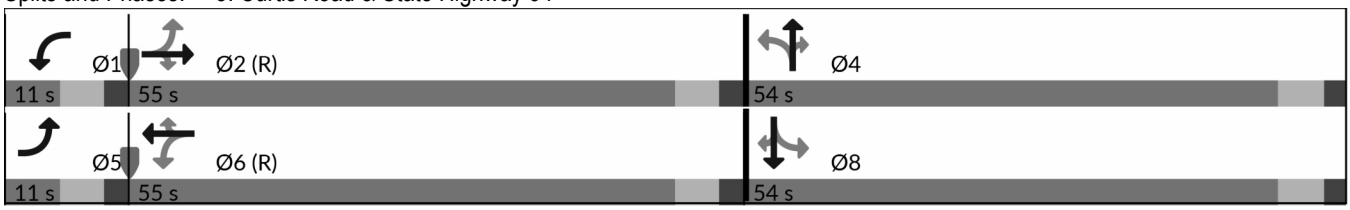
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay (s/veh): 17.3	Intersection LOS: B
Intersection Capacity Utilization 56.3%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	364	64	20	190	0	550	0	24	0	0	0
Future Volume (vph)	1	364	64	20	190	0	550	0	24	0	0	0
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	0	1770	1583	0	1863	1863
Flt Permitted	0.583			0.369				0.757				
Satd. Flow (perm)	1086	1863	1583	687	1863	0	0	1410	1583	0	1863	1863
Satd. Flow (RTOR)			82						82			
Lane Group Flow (vph)	1	396	70	22	207	0	0	598	26	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	45.0	45.0		45.0	45.0		75.0	75.0		75.0	75.0	75.0
Total Split (%)	37.5%	37.5%		37.5%	37.5%		62.5%	62.5%		62.5%	62.5%	62.5%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	47.7	47.7	120.0	47.7	47.7			60.3	120.0			
Actuated g/C Ratio	0.40	0.40	1.00	0.40	0.40			0.50	1.00			
v/c Ratio	0.00	0.53	0.04	0.08	0.27			0.84	0.01			
Control Delay (s/veh)	53.0	48.8	0.0	27.9	28.1			37.0	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay (s/veh)	53.0	48.8	0.0	27.9	28.1			37.0	0.0			
LOS	D	D	A	C	C			D	A			
Approach Delay (s/veh)		41.5			28.1			35.5				
Approach LOS		D			C			D				
Queue Length 50th (ft)	1	259	0	11	111			371	0			
Queue Length 95th (ft)	m2	428	0	33	188			482	0			
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)	115		600	190					340			
Base Capacity (vph)	431	740	1583	272	740			810	1583			
Starvation Cap Reductn	0	0	0	0	0			0	0			
Spillback Cap Reductn	0	0	0	0	0			0	0			
Storage Cap Reductn	0	0	0	0	0			0	0			
Reduced v/c Ratio	0.00	0.54	0.04	0.08	0.28			0.74	0.02			

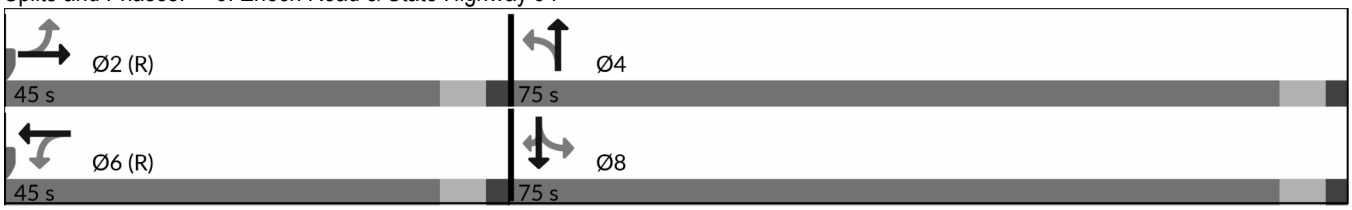
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay (s/veh): 36.3	Intersection LOS: D
Intersection Capacity Utilization 59.6%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	361	197	8	11	13
Future Vol, veh/h	35	361	197	8	11	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	392	214	9	12	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	223	0	-	0	687	218
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	468	-
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	1346	-	-	-	413	821
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	630	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1346	-	-	-	398	821
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.69	0	11.85
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	159	-	-	-	552
HCM Lane V/C Ratio	0.028	-	-	-	0.047
HCM Control Delay (s/veh)	7.8	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	371	197	0	0	0
Future Vol, veh/h	1	371	197	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	403	214	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	214	0	-	0	620	214
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	405	-
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	1356	-	-	-	452	826
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1356	-	-	-	451	826
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.02	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	5	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s/veh)	7.7	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	297	25	17	170	24	17	4	10	24	11	10
Future Vol, veh/h	20	297	25	17	170	24	17	4	10	24	11	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	323	27	18	185	26	18	4	11	26	12	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	211	0	0	350	0	0	608	628	336	603	628	198
Stage 1	-	-	-	-	-	-	380	380	-	235	235	-
Stage 2	-	-	-	-	-	-	228	248	-	368	393	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1360	-	-	1209	-	-	408	400	706	411	400	843
Stage 1	-	-	-	-	-	-	642	614	-	768	711	-
Stage 2	-	-	-	-	-	-	775	701	-	651	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1360	-	-	1209	-	-	379	387	706	388	387	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	379	387	-	388	387	-
Stage 1	-	-	-	-	-	-	632	604	-	757	700	-
Stage 2	-	-	-	-	-	-	740	691	-	627	596	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.45	0.65	13.72	14.19
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	447	1360	-	-	1209	-	-	440
HCM Lane V/C Ratio	0.075	0.016	-	-	0.015	-	-	0.111
HCM Control Delay (s/veh)	13.7	7.7	-	-	8	-	-	14.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.4

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	461	720	672	501	598	278
Future Volume (vph)	461	720	672	501	598	278
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.224	
Satd. Flow (perm)	3433	1583	3539	1583	417	3539
Satd. Flow (RTOR)		686		545		
Lane Group Flow (vph)	501	783	730	545	650	302
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	30.0		46.0		44.0	90.0
Total Split (%)	25.0%		38.3%		36.7%	75.0%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	21.7	120.0	44.9	120.0	86.3	86.3
Actuated g/C Ratio	0.18	1.00	0.37	1.00	0.72	0.72
v/c Ratio	0.80	0.49	0.55	0.34	0.92	0.11
Control Delay (s/veh)	58.0	1.1	32.8	0.5	41.0	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.0	1.1	32.8	0.5	41.0	5.5
LOS	E	A	C	A	D	A
Approach Delay (s/veh)	23.3		19.1			29.8
Approach LOS	C		B			C
Queue Length 50th (ft)	191	0	248	0	322	34
Queue Length 95th (ft)	250	0	315	0	#565	51
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	686	1583	1323	1583	731	2546
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	0.73	0.49	0.55	0.34	0.89	0.12

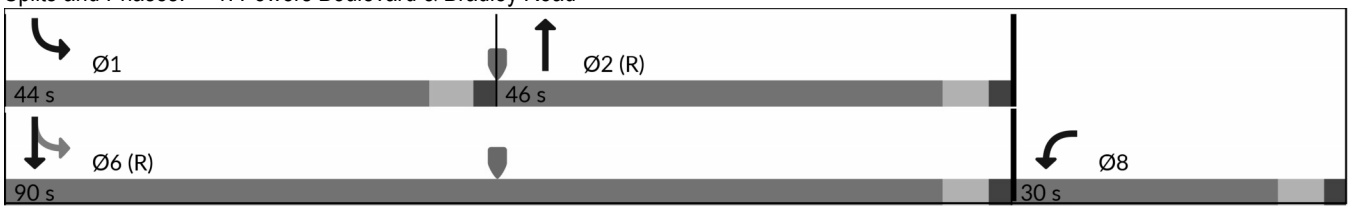
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	579	261	311	5	105	110	498	1173	0	579	596	718
Future Volume (vph)	579	261	311	5	105	110	498	1173	0	579	596	718
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			338			245						756
Lane Group Flow (vph)	629	284	338	5	114	120	541	1275	0	629	648	780
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		30.0	51.0		29.0	50.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		25.0%	42.5%		24.2%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	31.8	120.0	5.0	5.0	120.0	22.5	45.0		23.0	45.5	120.0
Actuated g/C Ratio	0.19	0.27	1.00	0.04	0.04	1.00	0.19	0.38		0.19	0.38	1.00
v/c Ratio	0.95	0.30	0.21	0.06	0.77	0.07	0.84	0.96		0.95	0.48	0.49
Control Delay (s/veh)	74.3	37.2	0.3	57.4	89.3	0.0	59.7	53.9		74.3	30.1	1.0
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 (s/veh)	74.3	37.2	0.3	57.4	89.3	0.0	59.7	53.9		74.3	30.1	1.0
LOS	E	D	A	E	F	A	E	D		E	C	A
Approach Delay (s/veh)		45.9			43.9			55.7			32.7	
Approach LOS		D			D			E			C	
Queue Length 50th (ft)	251	90	0	4	46	0	206	503		251	203	0
Queue Length 95th (ft)	#366	146	0	18	#97	0	271	#656		#366	260	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	937	1583	73	147	1583	686	1327		657	1342	1583
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	0.30	0.21	0.07	0.78	0.08	0.79	0.96		0.96	0.48	0.49

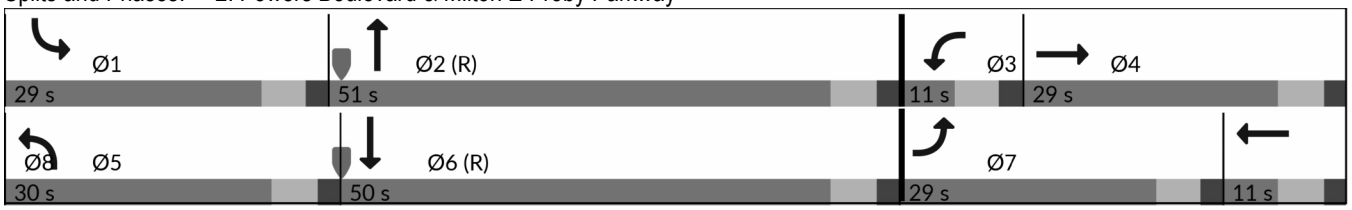
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 44.0	Intersection LOS: D
Intersection Capacity Utilization 87.1%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	23	80	205	395	35	1	146	783	572	12	1786	47
Future Volume (vph)	23	80	205	395	35	1	146	783	572	12	1786	47
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			622			245
Lane Group Flow (vph)	25	87	223	429	38	1	159	851	622	13	1941	51
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	12.0		20.0	21.0		17.0	77.0		11.0	71.0	
Total Split (%)	9.2%	10.0%		16.7%	17.5%		14.2%	64.2%		9.2%	59.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	6.0	120.0	14.0	19.4	120.0	11.0	77.6	120.0	5.0	65.0	120.0
Actuated g/C Ratio	0.04	0.05	1.00	0.12	0.16	1.00	0.09	0.65	1.00	0.04	0.54	1.00
v/c Ratio	0.17	0.93	0.14	1.07	0.06	0.00	0.98	0.37	0.39	0.17	1.01	0.03
Control Delay (s/veh)	58.4	134.1	0.1	138.3	58.6	0.0	120.8	11.0	0.7	61.2	51.6	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	0.0
Total Delay (s/veh)	58.4	134.1	0.1	138.3	58.6	0.0	120.8	11.0	0.7	61.2	51.6	0.0
LOS	E	F	A	F	E	A	F	B	A	E	D	A
Approach Delay (s/veh)		39.3			131.5			17.8			50.4	
Approach LOS		D			F			B			D	
Queue Length 50th (ft)	9	68	0	~197	11	0	125	131	0	10	~792	0
Queue Length 95th (ft)	25	#173	0	#304	m18	m0	#266	220	0	32	#971	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	93	1583	400	572	1583	162	2288	1583	73	1916	1583
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	0.17	0.94	0.14	1.07	0.07	0.00	0.98	0.37	0.39	0.18	1.01	0.03

Intersection Summary

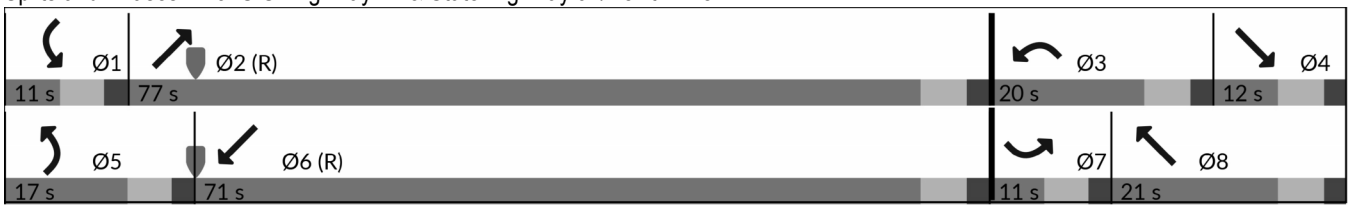
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D
Intersection Capacity Utilization 90.4%	ICU Level of Service E
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	468	179	59	354	153	83	639	75	385	1455	2
Future Volume (vph)	1	468	179	59	354	153	83	639	75	385	1455	2
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.281			0.113			0.088			0.240		
Satd. Flow (perm)	523	1863	1583	210	1863	1583	164	3539	1583	447	3539	1583
Satd. Flow (RTOR)			132			166			136			82
Lane Group Flow (vph)	1	509	195	64	385	166	90	695	82	418	1582	2
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	44.0	44.0	44.0	44.0	44.0	44.0	12.0	44.0	44.0	32.0	64.0	64.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	10.0%	36.7%	36.7%	26.7%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	35.7	35.7	35.7	35.7	35.7	35.7	51.1	45.3	45.3	72.3	60.5	60.5
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.30	0.43	0.38	0.38	0.60	0.50	0.50
v/c Ratio	0.00	0.92	0.34	1.03	0.69	0.28	0.58	0.52	0.12	0.82	0.88	0.00
Control Delay (s/veh)	30.0	62.6	12.7	166.8	44.4	5.7	38.6	32.2	1.0	29.8	34.6	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	0.0
Total Delay (s/veh)	30.0	62.6	12.7	166.8	44.4	5.7	38.6	32.2	1.0	29.8	34.6	0.0
LOS	C	E	B	F	D	A	D	C	A	C	C	A
Approach Delay (s/veh)		48.8			46.7			29.9			33.6	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	1	381	43	49	256	0	29	230	0	167	581	0
Queue Length 95th (ft)	m1	m#543	m99	#143	367	49	#96	304	6	281	#716	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	165	589	591	66	589	614	154	1336	682	556	1785	839
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	0.01	0.86	0.33	0.97	0.65	0.27	0.58	0.52	0.12	0.75	0.89	0.00

Intersection Summary

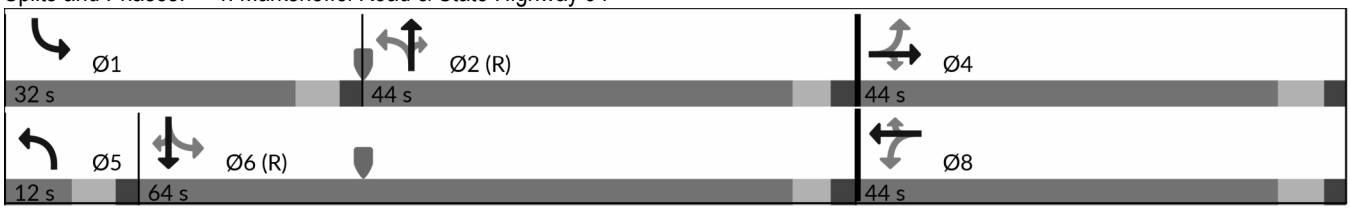
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay (s/veh): 37.3	Intersection LOS: D
Intersection Capacity Utilization 93.2%	ICU Level of Service F
Analysis Period (min) 15	

\# 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	633	301	68	489	35	60	32	33	296	188	28
Future Volume (vph)	14	633	301	68	489	35	60	32	33	296	188	28
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.370			0.217			0.529			0.734		
Satd. Flow (perm)	689	1863	1583	404	1863	1583	985	1863	1583	1367	1863	1583
Satd. Flow (RTOR)			327			82			82			82
Lane Group Flow (vph)	15	688	327	74	532	38	65	35	36	322	204	30
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	64.0	64.0	11.0	64.0	64.0	45.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	9.2%	53.3%	53.3%	9.2%	53.3%	53.3%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	70.1	65.6	65.6	73.1	70.8	70.8	32.5	32.5	32.5	32.5	32.5	32.5
Actuated g/C Ratio	0.58	0.55	0.55	0.61	0.59	0.59	0.27	0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.03	0.67	0.32	0.23	0.48	0.03	0.24	0.06	0.07	0.87	0.40	0.06
Control Delay (s/veh)	10.6	26.0	2.7	13.8	20.8	2.6	34.4	30.0	0.3	64.5	37.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.6	26.0	2.7	13.8	20.8	2.6	34.4	30.0	0.3	64.5	37.1	0.2
LOS	B	C	A	B	C	A	C	C	A	E	D	A
Approach Delay (s/veh)		18.4			19.0			24.3			51.0	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)	4	403	0	25	220	1	39	20	0	235	128	0
Queue Length 95th (ft)	14	585	48	48	466	7	74	43	0	334	186	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	453	1019	1014	316	1099	968	320	605	569	444	605	569
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	0.03	0.68	0.32	0.23	0.48	0.04	0.20	0.06	0.06	0.73	0.34	0.05

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 26.6	Intersection LOS: C
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: Curtis Road & State Highway 94

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	169	801	59	462	0	106	0	21	0	14	3
Future Volume (vph)	0	169	801	59	462	0	106	0	21	0	14	3
Satd. Flow (prot)	1863	1863	1583	1770	1863	0	0	1770	1583	0	1863	1583
Flt Permitted				0.641				0.748				
Satd. Flow (perm)	1863	1863	1583	1194	1863	0	0	1393	1583	0	1863	1583
Satd. Flow (RTOR)			871						164			55
Lane Group Flow (vph)	0	184	871	64	502	0	0	115	23	0	15	3
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	40.0	40.0		40.0	40.0		20.0	20.0		20.0	20.0	20.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		41.5	60.0	41.5	41.5			10.1	60.0		10.0	10.0
Actuated g/C Ratio		0.69	1.00	0.69	0.69			0.17	1.00		0.17	0.17
v/c Ratio		0.14	0.55	0.07	0.39			0.49	0.01		0.04	0.00
Control Delay (s/veh)		3.1	1.0	5.5	7.0			29.0	0.0		19.2	0.0
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.1	1.0	5.5	7.0			29.0	0.0		19.2	0.0
LOS		A	A	A	A			C	A		B	A
Approach Delay (s/veh)		1.4			6.9			24.2			16.1	
Approach LOS		A			A			C			B	
Queue Length 50th (ft)		15	0	8	77			38	0		5	0
Queue Length 95th (ft)		m48	0	24	159			75	0		17	0
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)			600	190					340			100
Base Capacity (vph)		1287	1583	825	1287			325	1583		434	411
Starvation Cap Reductn		0	0	0	0			0	0		0	0
Spillback Cap Reductn		0	0	0	0			0	0		0	0
Storage Cap Reductn		0	0	0	0			0	0		0	0
Reduced v/c Ratio		0.14	0.55	0.08	0.39			0.35	0.01		0.03	0.01

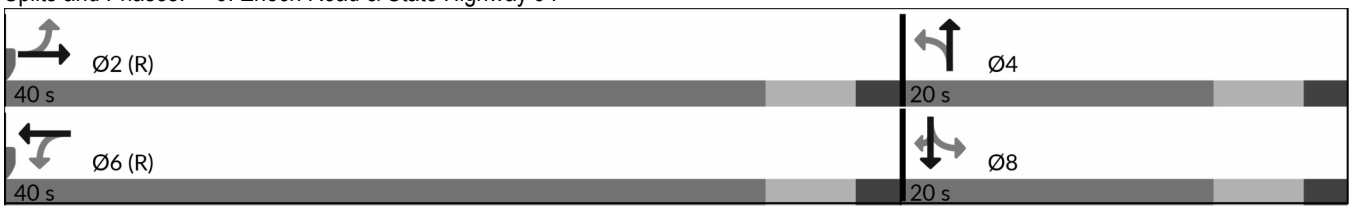
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay (s/veh): 5.1	Intersection LOS: A
Intersection Capacity Utilization 56.0%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	184	468	5	7	53
Future Vol, veh/h	3	184	468	5	7	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	200	509	5	8	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	514	0	-	0	718	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	207	-
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	1051	-	-	-	396	562
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1051	-	-	-	394	562
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.14	0	12.65
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	29	-	-	-	536
HCM Lane V/C Ratio	0.003	-	-	-	0.122
HCM Control Delay (s/veh)	8.4	0	-	-	12.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	190	420	0	0	1
Future Vol, veh/h	0	190	420	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	207	457	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	457	0	-	0	663	457
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	207	-
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	1104	-	-	-	426	604
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1104	-	-	-	426	604
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.97
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1104	-	-	-	604
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s/veh)	0	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	178	10	16	364	41	32	14	16	19	10	25
Future Vol, veh/h	7	178	10	16	364	41	32	14	16	19	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	193	11	17	396	45	35	15	17	21	11	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	440	0	0	204	0	0	650	689	199	669	672	418
Stage 1	-	-	-	-	-	-	214	214	-	453	453	-
Stage 2	-	-	-	-	-	-	436	475	-	216	220	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1120	-	-	1367	-	-	382	369	842	371	377	635
Stage 1	-	-	-	-	-	-	788	725	-	587	570	-
Stage 2	-	-	-	-	-	-	599	557	-	786	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1120	-	-	1367	-	-	348	361	842	342	370	635
Mov Cap-2 Maneuver	-	-	-	-	-	-	348	361	-	342	370	-
Stage 1	-	-	-	-	-	-	783	720	-	579	563	-
Stage 2	-	-	-	-	-	-	555	550	-	748	717	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.29	15.36	14.37
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	415	1120	-	-	1367	-	-	443
HCM Lane V/C Ratio	0.163	0.007	-	-	0.013	-	-	0.133
HCM Control Delay (s/veh)	15.4	8.2	-	-	7.7	-	-	14.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.5

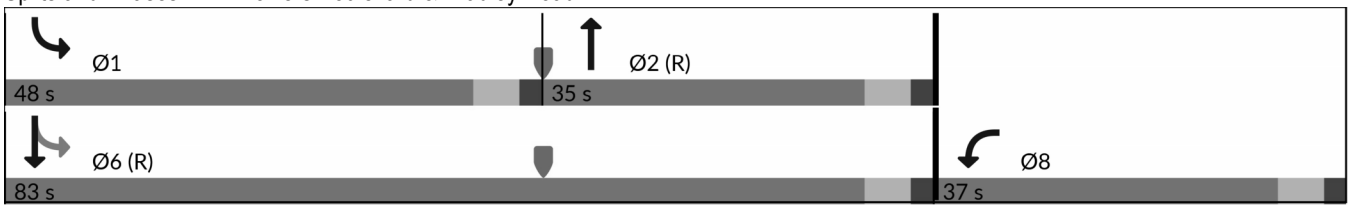
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	533	621	351	674	509	711
Future Volume (vph)	533	621	351	674	509	711
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.450	
Satd. Flow (perm)	3433	1583	3539	1583	838	3539
Satd. Flow (RTOR)		675		590		
Lane Group Flow (vph)	579	675	382	733	553	773
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	37.0		35.0		48.0	83.0
Total Split (%)	30.8%		29.2%		40.0%	69.2%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	25.4	120.0	52.7	120.0	82.6	82.6
Actuated g/C Ratio	0.21	1.00	0.44	1.00	0.69	0.69
v/c Ratio	0.79	0.42	0.24	0.46	0.72	0.31
Control Delay (s/veh)	53.4	0.8	24.3	0.9	15.2	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.4	0.8	24.3	0.9	15.2	8.2
LOS	D	A	C	A	B	A
Approach Delay (s/veh)	25.1		9.0			11.2
Approach LOS	C		A			B
Queue Length 50th (ft)	220	0	93	0	175	113
Queue Length 95th (ft)	268	0	171	0	290	168
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	886	1583	1555	1583	903	2437
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	0.65	0.43	0.25	0.46	0.61	0.32

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 15.3	Intersection LOS: B
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	632	125	480	18	222	382	319	686	11	171	1090	566
Future Volume (vph)	632	125	480	18	222	382	319	686	11	171	1090	566
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			503			311			245			414
Lane Group Flow (vph)	687	136	522	20	241	415	347	746	12	186	1185	615
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	33.0	38.0		11.0	16.0		21.0	55.0		16.0	50.0	
Total Split (%)	27.5%	31.7%		9.2%	13.3%		17.5%	45.8%		13.3%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	26.3	38.0	120.0	5.0	10.1	120.0	14.7	49.9	120.0	9.7	44.9	120.0
Actuated g/C Ratio	0.22	0.32	1.00	0.04	0.08	1.00	0.12	0.42	1.00	0.08	0.37	1.00
v/c Ratio	0.91	0.12	0.32	0.27	0.81	0.26	0.82	0.50	0.00	0.67	0.89	0.38
Control Delay (s/veh)	63.1	30.8	0.5	65.3	75.5	0.4	68.6	27.6	0.0	66.0	45.6	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 (s/veh)	63.1	30.8	0.5	65.3	75.5	0.4	68.6	27.6	0.0	66.0	45.6	0.7
LOS	E	C	A	E	E	A	E	C	A	E	D	A
Approach Delay (s/veh)		35.6			29.1			40.2			33.6	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	267	36	0	15	98	0	136	224	0	73	455	0
Queue Length 95th (ft)	#369	69	0	42	#165	0	#207	283	0	112	#591	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	772	1121	1583	73	296	1583	429	1471	1583	286	1324	1583
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	0.89	0.12	0.33	0.27	0.81	0.26	0.81	0.51	0.01	0.65	0.90	0.39

Intersection Summary

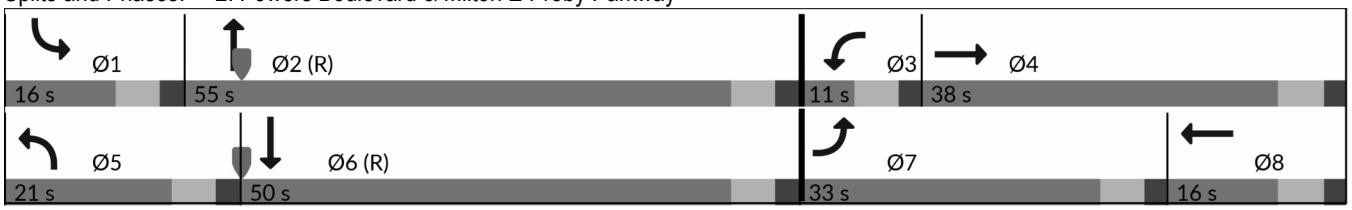
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 35.0	Intersection LOS: C
Intersection Capacity Utilization 83.4%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	47	187	355	51	7	202	1863	440	11	117	32
Future Volume (vph)	30	47	187	355	51	7	202	1863	440	11	117	32
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			300			300			374			300
Lane Group Flow (vph)	33	51	203	386	55	8	220	2025	478	12	127	35
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	12.0		22.0	23.0		28.0	75.0		11.0	58.0	
Total Split (%)	9.2%	10.0%		18.3%	19.2%		23.3%	62.5%		9.2%	48.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.9	120.0	15.7	18.7	120.0	18.9	78.3	120.0	5.1	57.8	120.0
Actuated g/C Ratio	0.04	0.05	1.00	0.13	0.16	1.00	0.16	0.65	1.00	0.04	0.48	1.00
v/c Ratio	0.23	0.55	0.12	0.86	0.09	0.00	0.79	0.87	0.30	0.16	0.07	0.02
Control Delay (s/veh)	59.7	78.5	0.1	78.9	63.6	0.0	68.6	24.6	0.4	60.4	18.7	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	0.0
Total Delay (s/veh)	59.7	78.5	0.1	78.9	63.6	0.0	68.6	24.6	0.4	60.4	18.7	0.0
LOS	E	E	A	E	E	A	E	C	A	E	B	A
Approach Delay (s/veh)		20.9			75.7			23.9			17.9	
Approach LOS		C			E			C			B	
Queue Length 50th (ft)	12	39	0	163	23	0	164	588	0	9	28	0
Queue Length 95th (ft)	30	#93	0	#237	m36	m0	249	#992	0	30	49	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	93	1583	457	566	1583	324	2309	1583	75	1705	1583
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	0.23	0.55	0.13	0.84	0.10	0.01	0.68	0.88	0.30	0.16	0.07	0.02

Intersection Summary

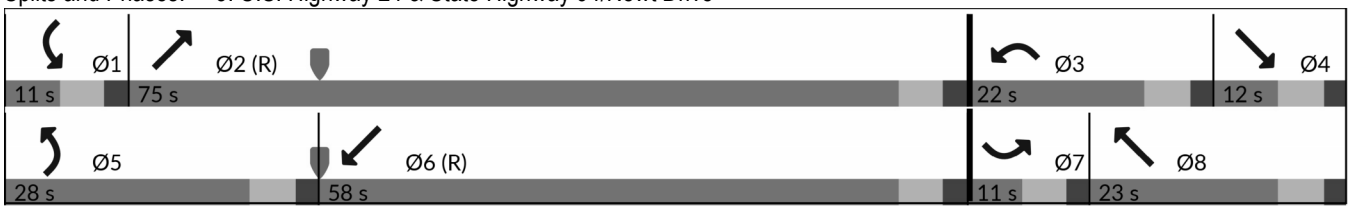
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 29.8	Intersection LOS: C
Intersection Capacity Utilization 78.3%	ICU Level of Service D
Analysis Period (min) 15	

\# 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	333	158	100	375	389	102	1164	32	153	681	14
Future Volume (vph)	2	333	158	100	375	389	102	1164	32	153	681	14
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.195			0.266			0.333			0.105		
Satd. Flow (perm)	363	1863	1583	495	1863	1583	620	3539	1583	196	3539	1583
Satd. Flow (RTOR)			172			114			82			82
Lane Group Flow (vph)	2	362	172	109	408	423	111	1265	35	166	740	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	44.0	44.0	44.0	44.0	44.0	44.0	11.0	59.0	59.0	17.0	65.0	65.0
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	9.2%	49.2%	49.2%	14.2%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	31.7	31.7	31.7	31.7	31.7	31.7	66.4	60.2	60.2	74.3	64.1	64.1
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.26	0.55	0.50	0.50	0.62	0.53	0.53
v/c Ratio	0.02	0.73	0.31	0.83	0.83	0.84	0.27	0.71	0.04	0.63	0.39	0.01
Control Delay (s/veh)	35.0	51.7	8.8	86.4	56.1	45.6	12.3	27.3	0.0	24.8	17.9	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	0.0
Total Delay (s/veh)	35.0	51.7	8.8	86.4	56.1	45.6	12.3	27.3	0.0	24.8	17.9	0.0
LOS	C	D	A	F	E	D	B	C	A	C	B	A
Approach Delay (s/veh)		37.9			54.9			25.5			18.9	
Approach LOS		D			D			C			B	
Queue Length 50th (ft)	1	263	0	79	296	233	32	404	0	49	178	0
Queue Length 95th (ft)	m3	351	59	#169	392	342	63	528	0	118	235	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	114	589	618	156	589	579	407	1775	835	274	1891	884
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	0.02	0.61	0.28	0.70	0.69	0.73	0.27	0.71	0.04	0.61	0.39	0.02

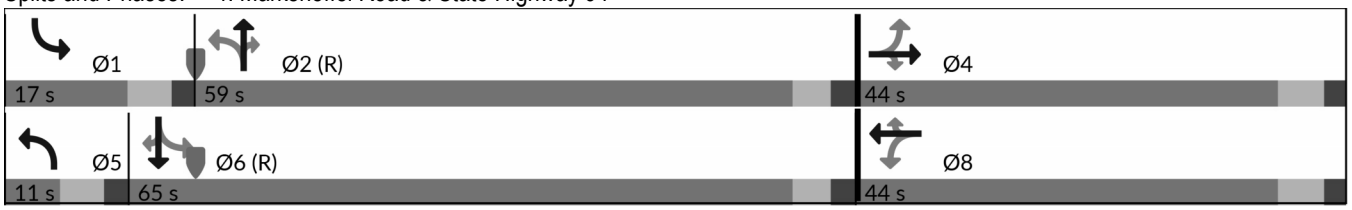
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay (s/veh): 32.9	Intersection LOS: C
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	404	39	34	562	250	222	28	61	24	29	21
Future Volume (vph)	25	404	39	34	562	250	222	28	61	24	29	21
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.317			0.436			0.736			0.738		
Satd. Flow (perm)	590	1863	1583	812	1863	1583	1371	1863	1583	1375	1863	1583
Satd. Flow (RTOR)			82			272			82			82
Lane Group Flow (vph)	27	439	42	37	611	272	241	30	66	26	32	23
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	55.0	55.0	11.0	55.0	55.0	54.0	54.0	54.0	54.0	54.0	54.0
Total Split (%)	9.2%	45.8%	45.8%	9.2%	45.8%	45.8%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	77.2	73.2	73.2	77.6	73.4	73.4	27.0	27.0	27.0	27.0	27.0	27.0
Actuated g/C Ratio	0.64	0.61	0.61	0.65	0.61	0.61	0.23	0.23	0.23	0.23	0.23	0.23
v/c Ratio	0.06	0.38	0.04	0.06	0.53	0.25	0.78	0.07	0.15	0.08	0.07	0.05
Control Delay (s/veh)	8.8	15.9	0.5	8.2	14.2	2.4	60.4	33.5	5.1	33.7	33.6	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 (s/veh)	8.8	15.9	0.5	8.2	14.2	2.4	60.4	33.5	5.1	33.7	33.6	0.2
LOS	A	B	A	A	B	A	E	C	A	C	C	A
Approach Delay (s/veh)		14.3			10.5			47.3			24.2	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	6	181	0	9	164	13	177	18	0	16	20	0
Queue Length 95th (ft)	21	319	3	m16	m399	m22	245	40	24	37	42	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	440	1137	998	576	1140	1074	548	745	682	550	745	682
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	0.06	0.39	0.04	0.06	0.54	0.25	0.44	0.04	0.10	0.05	0.04	0.03

Intersection Summary

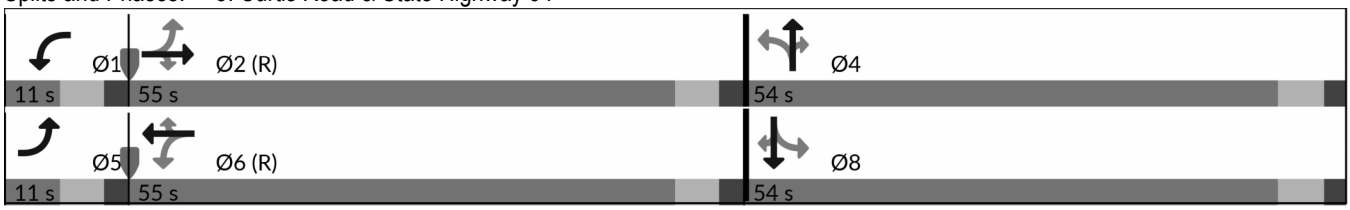
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 18.9	Intersection LOS: B
Intersection Capacity Utilization 61.0%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	410	72	23	214	0	619	0	27	0	0	0
Future Volume (vph)	1	410	72	23	214	0	619	0	27	0	0	0
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	0	1770	1583	0	1863	1863
Flt Permitted	0.538			0.282				0.757				
Satd. Flow (perm)	1002	1863	1583	525	1863	0	0	1410	1583	0	1863	1863
Satd. Flow (RTOR)			82						82			
Lane Group Flow (vph)	1	446	78	25	233	0	0	673	29	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	45.0	45.0		45.0	45.0		75.0	75.0		75.0	75.0	75.0
Total Split (%)	37.5%	37.5%		37.5%	37.5%		62.5%	62.5%		62.5%	62.5%	62.5%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	43.5	43.5	120.0	43.5	43.5			64.5	120.0			
Actuated g/C Ratio	0.36	0.36	1.00	0.36	0.36			0.54	1.00			
v/c Ratio	0.00	0.66	0.04	0.13	0.34			0.88	0.01			
Control Delay (s/veh)	51.0	55.7	0.0	30.7	31.1			39.3	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay (s/veh)	51.0	55.7	0.0	30.7	31.1			39.3	0.0			
LOS	D	E	A	C	C			D	A			
Approach Delay (s/veh)		47.5			31.1			37.8				
Approach LOS		D			C			D				
Queue Length 50th (ft)	1	335	0	14	137			412	0			
Queue Length 95th (ft)	m2	475	0	37	212			#616	0			
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)	115		600	190					340			
Base Capacity (vph)	363	675	1583	190	675			810	1583			
Starvation Cap Reductn	0	0	0	0	0			0	0			
Spillback Cap Reductn	0	0	0	0	0			0	0			
Storage Cap Reductn	0	0	0	0	0			0	0			
Reduced v/c Ratio	0.00	0.66	0.05	0.13	0.35			0.83	0.02			

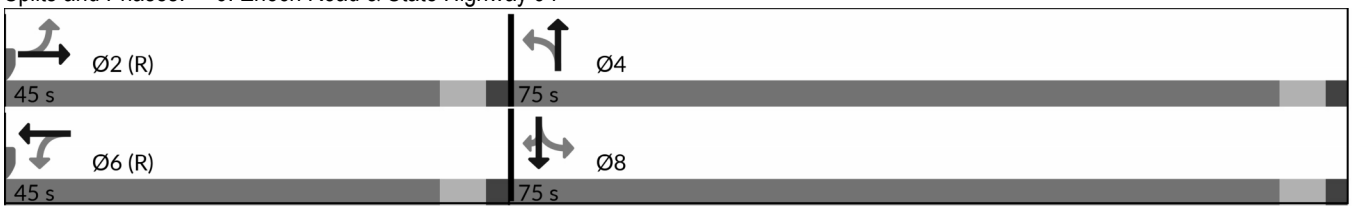
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 40.0	Intersection LOS: D
Intersection Capacity Utilization 65.9%	ICU Level of Service C
Analysis Period (min) 15	

\# 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	407	222	9	12	15
Future Vol, veh/h	39	407	222	9	12	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	442	241	10	13	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	251	0	-	0	773	246
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	527	-
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	1314	-	-	-	367	793
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	592	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1314	-	-	-	351	793
Mov Cap-2 Maneuver	-	-	-	-	351	-
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	592	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.68	0	12.51
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	157	-	-	-	509
HCM Lane V/C Ratio	0.032	-	-	-	0.058
HCM Control Delay (s/veh)	7.8	0	-	-	12.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	418	222	0	0	0
Future Vol, veh/h	1	418	222	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	454	241	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	241	0	-	0	698	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	457	-
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	1325	-	-	-	407	798
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1325	-	-	-	406	798
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.02	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	4	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s/veh)	7.7	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	334	28	1	191	27	19	5	11	27	12	11
Future Vol, veh/h	23	334	28	1	191	27	19	5	11	27	12	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	363	30	1	208	29	21	5	12	29	13	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	237	0	0	393	0	0	645	667	378	640	668	222
Stage 1	-	-	-	-	-	-	428	428	-	224	224	-
Stage 2	-	-	-	-	-	-	216	239	-	416	443	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1330	-	-	1165	-	-	385	379	668	388	379	817
Stage 1	-	-	-	-	-	-	605	584	-	778	718	-
Stage 2	-	-	-	-	-	-	786	707	-	614	575	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1330	-	-	1165	-	-	360	372	668	368	372	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	360	372	-	368	372	-
Stage 1	-	-	-	-	-	-	593	573	-	777	717	-
Stage 2	-	-	-	-	-	-	760	707	-	586	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.46	0.04	14.35	14.84
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	423	1330	-	-	1165	-	-	420
HCM Lane V/C Ratio	0.09	0.019	-	-	0.001	-	-	0.129
HCM Control Delay (s/veh)	14.4	7.8	-	-	8.1	-	-	14.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.4

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	598	938	905	631	745	374
Future Volume (vph)	598	938	905	631	745	374
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.103	
Satd. Flow (perm)	3433	1583	3539	1583	192	3539
Satd. Flow (RTOR)		740		547		
Lane Group Flow (vph)	650	1020	984	686	810	407
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	28.0		39.0		53.0	92.0
Total Split (%)	23.3%		32.5%		44.2%	76.7%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	22.0	120.0	33.0	120.0	86.0	86.0
Actuated g/C Ratio	0.18	1.00	0.28	1.00	0.72	0.72
v/c Ratio	1.03	0.64	1.01	0.43	1.07	0.16
Control Delay (s/veh)	92.6	2.0	75.0	0.8	84.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.6	2.0	75.0	0.8	84.2	5.6
LOS	F	A	E	A	F	A
Approach Delay (s/veh)	37.3		44.6			58.0
Approach LOS	D		D			E
Queue Length 50th (ft)	~278	0	~410	0	~646	47
Queue Length 95th (ft)	#396	0	#554	0	#890	63
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	629	1583	973	1583	755	2536
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	1.03	0.64	1.01	0.43	1.07	0.16

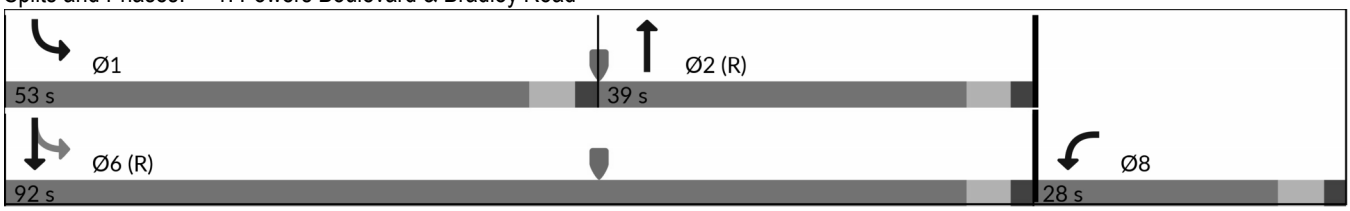
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay (s/veh): 45.5	Intersection LOS: D
Intersection Capacity Utilization 98.4%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	579	352	418	6	141	149	670	1579	0	779	802	967
Future Volume (vph)	579	352	418	6	141	149	670	1579	0	779	802	967
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			454			245						724
Lane Group Flow (vph)	629	383	454	7	153	162	728	1716	0	847	872	1051
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	24.0	24.0		11.0	11.0		35.0	55.0		30.0	50.0	
Total Split (%)	20.0%	20.0%		9.2%	9.2%		29.2%	45.8%		25.0%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	18.0	26.8	120.0	5.0	5.0	120.0	28.0	49.0		24.0	45.0	120.0
Actuated g/C Ratio	0.15	0.22	1.00	0.04	0.04	1.00	0.23	0.41		0.20	0.38	1.00
v/c Ratio	1.22	0.48	0.28	0.04	1.04	0.10	0.90	1.18		1.23	0.65	0.66
Control Delay (s/veh)	160.1	43.9	0.4	56.0	140.9	0.1	60.9	124.7		158.6	34.2	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	160.1	43.9	0.4	56.0	140.9	0.1	60.9	124.7		158.6	34.2	2.2
LOS	F	D	A	E	F	A	E	F		F	C	A
Approach Delay (s/veh)		80.3			68.2			105.8			60.1	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~308	133	0	2	~67	0	280	~842		~418	296	0
Queue Length 95th (ft)	#425	205	0	10	#139	0	#381	#982		#543	368	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	514	790	1583	143	147	1583	829	1445		686	1326	1583
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	1.22	0.48	0.29	0.05	1.04	0.10	0.88	1.19		1.23	0.66	0.66

Intersection Summary

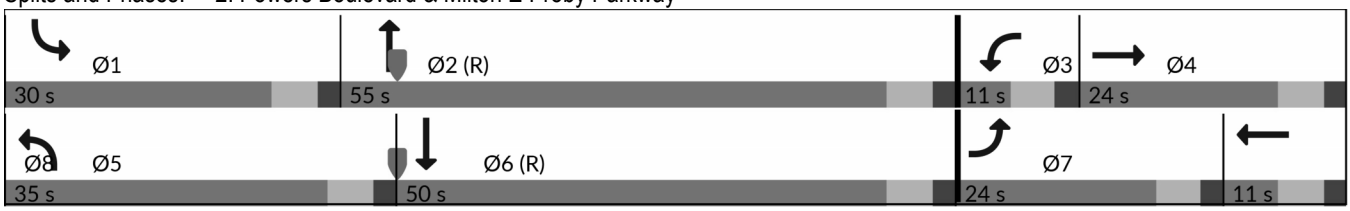
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay (s/veh): 80.7	Intersection LOS: F
Intersection Capacity Utilization 106.6%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	108	275	532	47	2	197	1054	769	17	2404	64
Future Volume (vph)	30	108	275	532	47	2	197	1054	769	17	2404	64
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			836			245
Lane Group Flow (vph)	33	117	299	578	51	2	214	1146	836	18	2613	70
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		21.0	21.0		11.0	77.0		11.0	77.0	
Total Split (%)	9.2%	9.2%		17.5%	17.5%		9.2%	64.2%		9.2%	64.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	15.0	19.4	120.0	5.0	77.6	120.0	5.0	71.0	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.13	0.16	1.00	0.04	0.65	1.00	0.04	0.59	1.00
v/c Ratio	0.23	1.51	0.18	1.34	0.08	0.00	1.49	0.50	0.52	0.24	1.24	0.04
Control Delay (s/veh)	59.7	327.5	0.2	211.1	44.1	0.0	295.4	12.7	1.2	64.0	141.2	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	0.0
Total Delay (s/veh)	59.7	327.5	0.2	211.1	44.1	0.0	295.4	12.7	1.2	64.0	141.2	0.0
LOS	E	F	A	F	D	A	F	B	A	E	F	A
Approach Delay (s/veh)		89.9			197.0			35.9			137.1	
Approach LOS		F			F			D			F	
Queue Length 50th (ft)	12	~126	0	~288	11	0	~118	198	0	14	~1328	0
Queue Length 95th (ft)	30	#249	0	m#396	m17	m0	#198	325	0	39	#1458	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	429	572	1583	143	2288	1583	73	2093	1583
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	0.23	1.52	0.19	1.35	0.09	0.00	1.50	0.50	0.53	0.25	1.25	0.04

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.52

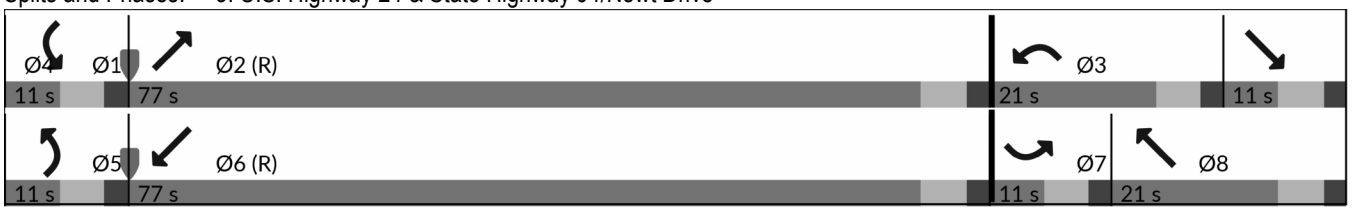
Intersection Signal Delay (s/veh): 102.7	Intersection LOS: F
Intersection Capacity Utilization 108.9%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	631	241	79	476	206	112	859	102	518	1958	3
Future Volume (vph)	2	631	241	79	476	206	112	859	102	518	1958	3
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.186			0.095			0.119			0.101		
Satd. Flow (perm)	346	1863	1583	177	1863	1583	222	3539	1583	188	3539	1583
Satd. Flow (RTOR)			132			224			136			82
Lane Group Flow (vph)	2	686	262	86	517	224	122	934	111	563	2128	3
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	48.0	48.0	48.0	48.0	48.0	48.0	11.0	39.0	39.0	33.0	61.0	61.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	9.2%	32.5%	32.5%	27.5%	50.8%	50.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	42.0	42.0	42.0	42.0	42.0	42.0	38.0	33.5	33.5	66.0	55.5	55.5
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.32	0.28	0.28	0.55	0.46	0.46
v/c Ratio	0.01	1.05	0.41	1.40	0.79	0.32	0.91	0.94	0.20	1.22	1.30	0.00
Control Delay (s/veh)	27.0	83.5	14.9	290.1	45.4	4.7	83.8	60.9	3.9	152.2	169.6	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	0.0
Total Delay (s/veh)	27.0	83.5	14.9	290.1	45.4	4.7	83.8	60.9	3.9	152.2	169.6	0.0
LOS	C	F	B	F	D	A	F	E	A	F	F	A
Approach Delay (s/veh)		64.5			59.9			58.0			165.8	
Approach LOS		E			E			E			F	
Queue Length 50th (ft)	1	~587	84	~89	358	0	45	373	0	~489	~1111	0
Queue Length 95th (ft)	m2	m#748	m144	#197	499	53	#159	#503	28	#712	#1248	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	121	652	639	61	652	699	134	987	539	459	1636	776
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	0.02	1.05	0.41	1.41	0.79	0.32	0.91	0.95	0.21	1.23	1.30	0.00

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.41

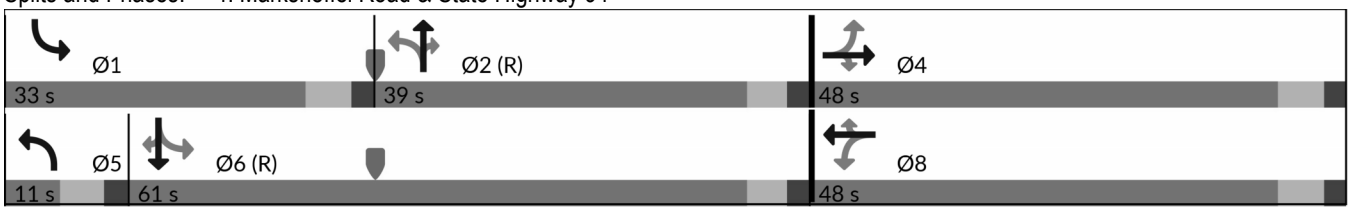
Intersection Signal Delay (s/veh): 110.9	Intersection LOS: F
Intersection Capacity Utilization 117.5%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	852	406	91	656	47	80	42	44	399	253	38
Future Volume (vph)	18	852	406	91	656	47	80	42	44	399	253	38
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.208			0.063			0.447			0.727		
Satd. Flow (perm)	387	1863	1583	117	1863	1583	833	1863	1583	1354	1863	1583
Satd. Flow (RTOR)			325			82			82			82
Lane Group Flow (vph)	20	926	441	99	713	51	87	46	48	434	275	41
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	66.0	66.0	11.0	66.0	66.0	43.0	43.0	43.0	43.0	43.0	43.0
Total Split (%)	9.2%	55.0%	55.0%	9.2%	55.0%	55.0%	35.8%	35.8%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	65.0	60.0	60.0	68.6	66.6	66.6	37.0	37.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.54	0.50	0.50	0.57	0.56	0.56	0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.07	0.99	0.46	0.72	0.68	0.05	0.33	0.08	0.08	1.04	0.47	0.07
Control Delay (s/veh)	10.9	58.6	6.5	48.2	27.0	3.7	36.7	30.0	2.1	96.0	37.0	0.8
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 (s/veh)	10.9	58.6	6.5	48.2	27.0	3.7	36.7	30.0	2.1	96.0	37.0	0.8
LOS	B	E	A	D	C	A	D	C	A	F	D	A
Approach Delay (s/veh)		41.4			28.1			25.8			69.2	
Approach LOS		D			C			C			E	
Queue Length 50th (ft)	6	691	47	34	381	2	52	25	0	~363	173	0
Queue Length 95th (ft)	17	#990	120	#121	649	m10	101	54	9	#566	257	4
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	267	931	954	136	1034	915	256	574	544	417	574	544
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	0.07	0.99	0.46	0.73	0.69	0.06	0.34	0.08	0.09	1.04	0.48	0.08

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay (s/veh): 43.5	Intersection LOS: D
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	227	1079	79	621	0	142	0	29	0	18	5
Future Volume (vph)	0	227	1079	79	621	0	142	0	29	0	18	5
Satd. Flow (prot)	1863	1863	1583	1770	1863	0	0	1770	1583	0	1863	1583
Flt Permitted				0.606				0.744				
Satd. Flow (perm)	1863	1863	1583	1129	1863	0	0	1386	1583	0	1863	1583
Satd. Flow (RTOR)			922						164			55
Lane Group Flow (vph)	0	247	1173	86	675	0	0	154	32	0	20	5
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	19.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	31.7%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		40.9	60.0	40.9	40.9			10.8	60.0		10.6	10.6
Actuated g/C Ratio		0.68	1.00	0.68	0.68			0.18	1.00		0.18	0.18
v/c Ratio		0.19	0.74	0.11	0.53			0.61	0.02		0.06	0.01
Control Delay (s/veh)		4.1	2.7	5.9	8.9			33.2	0.0		19.4	0.0
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0		0.0	0.0
Total Delay (s/veh)		4.1	2.7	5.9	8.9			33.2	0.0		19.4	0.0
LOS		A	A	A	A			C	A		B	A
Approach Delay (s/veh)		3.0			8.6			27.5			15.6	
Approach LOS		A			A			C			B	
Queue Length 50th (ft)		48	0	12	131			51	0		6	0
Queue Length 95th (ft)		m49	m0	29	233			100	0		20	0
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)			600	190					340			100
Base Capacity (vph)		1270	1583	769	1270			300	1583		403	386
Starvation Cap Reductn		0	0	0	0			0	0		0	0
Spillback Cap Reductn		0	0	0	0			0	0		0	0
Storage Cap Reductn		0	0	0	0			0	0		0	0
Reduced v/c Ratio		0.19	0.74	0.11	0.53			0.51	0.02		0.05	0.01

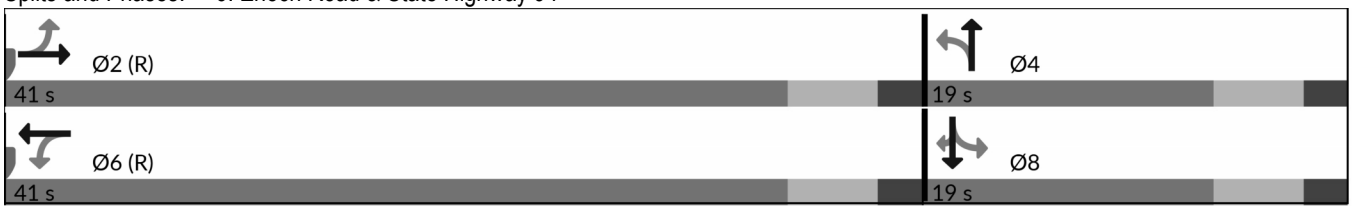
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 6.8	Intersection LOS: A
Intersection Capacity Utilization 66.4%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	247	631	6	9	71
Future Vol, veh/h	5	247	631	6	9	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	268	686	7	10	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	692	0	-	0	968	689
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	279	-
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	903	-	-	-	281	446
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	903	-	-	-	279	446
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	768	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.18	0	15.87
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	36	-	-	-	418
HCM Lane V/C Ratio	0.006	-	-	-	0.208
HCM Control Delay (s/veh)	9	0	-	-	15.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.8

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	256	565	0	0	2
Future Vol, veh/h	0	256	565	0	0	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	278	614	0	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	614	0	-	0	892	614
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	278	-
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	965	-	-	-	312	492
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	769	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	965	-	-	-	312	492
Mov Cap-2 Maneuver	-	-	-	-	312	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.35
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	965	-	-	-	492
HCM Lane V/C Ratio	-	-	-	-	0.004
HCM Control Delay (s/veh)	0	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	239	14	21	490	55	42	18	21	26	14	33
Future Vol, veh/h	9	239	14	21	490	55	42	18	21	26	14	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	260	15	23	533	60	46	20	23	28	15	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	592	0	0	275	0	0	873	925	267	897	903	563
Stage 1	-	-	-	-	-	-	287	287	-	608	608	-
Stage 2	-	-	-	-	-	-	586	638	-	289	295	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	983	-	-	1288	-	-	271	269	771	261	277	526
Stage 1	-	-	-	-	-	-	720	674	-	483	486	-
Stage 2	-	-	-	-	-	-	496	471	-	719	669	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	983	-	-	1288	-	-	232	262	771	228	270	526
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	262	-	228	270	-
Stage 1	-	-	-	-	-	-	713	668	-	474	477	-
Stage 2	-	-	-	-	-	-	440	463	-	670	663	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.29	22.55	19.97
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	292	983	-	-	1288	-	-	319
HCM Lane V/C Ratio	0.301	0.01	-	-	0.018	-	-	0.249
HCM Control Delay (s/veh)	22.5	8.7	-	-	7.8	-	-	20
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.2	0	-	-	0.1	-	-	1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	677	778	473	878	643	956
Future Volume (vph)	677	778	473	878	643	956
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.261	
Satd. Flow (perm)	3433	1583	3539	1583	486	3539
Satd. Flow (RTOR)		737		543		
Lane Group Flow (vph)	736	846	514	954	699	1039
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	36.0		29.0		55.0	84.0
Total Split (%)	30.0%		24.2%		45.8%	70.0%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	28.7	120.0	30.4	120.0	79.3	79.3
Actuated g/C Ratio	0.24	1.00	0.25	1.00	0.66	0.66
v/c Ratio	0.89	0.53	0.57	0.60	0.89	0.44
Control Delay (s/veh)	58.8	1.2	44.2	1.7	34.6	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.8	1.2	44.2	1.7	34.6	10.6
LOS	E	A	D	A	C	B
Approach Delay (s/veh)	28.1		16.6			20.3
Approach LOS	C		B			C
Queue Length 50th (ft)	281	0	194	0	366	193
Queue Length 95th (ft)	#376	0	263	0	#545	237
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	858	1583	897	1583	845	2339
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	0.86	0.53	0.57	0.60	0.83	0.44

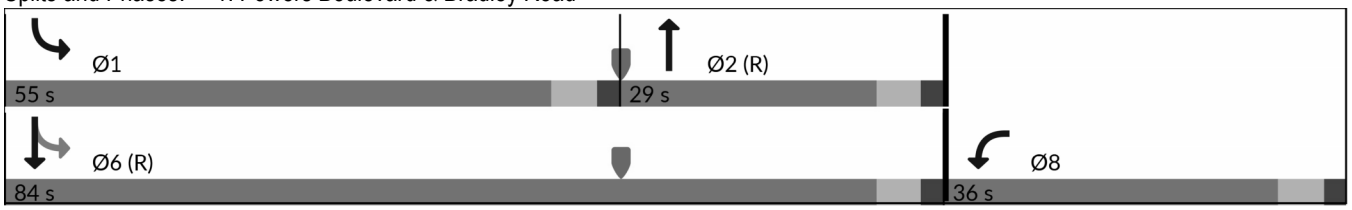
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 21.8	Intersection LOS: C
Intersection Capacity Utilization 83.0%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	850	168	646	24	299	514	429	923	15	230	1467	762
Future Volume (vph)	850	168	646	24	299	514	429	923	15	230	1467	762
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			464			272			245			414
Lane Group Flow (vph)	924	183	702	26	325	559	466	1003	16	250	1595	828
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	32.0	36.0		11.0	15.0		19.0	56.0		17.0	54.0	
Total Split (%)	26.7%	30.0%		9.2%	12.5%		15.8%	46.7%		14.2%	45.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	26.0	34.4	120.0	5.0	9.0	120.0	13.0	50.1	120.0	10.9	48.0	120.0
Actuated g/C Ratio	0.22	0.29	1.00	0.04	0.08	1.00	0.11	0.42	1.00	0.09	0.40	1.00
v/c Ratio	1.24	0.18	0.44	0.18	1.22	0.35	1.25	0.67	0.01	0.80	1.12	0.52
Control Delay (s/veh)	160.6	34.1	0.9	58.5	176.5	0.6	179.1	31.3	0.0	73.0	101.2	1.2
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 (s/veh)	160.6	34.1	0.9	58.5	176.5	0.6	179.1	31.3	0.0	73.0	101.2	1.2
LOS	F	C	A	E	F	A	F	C	A	E	F	A
Approach Delay (s/veh)		85.9			65.1			77.4			67.6	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	~458	59	0	10	~163	0	~232	327	0	99	~752	0
Queue Length 95th (ft)	#586	91	0	25	#258	0	#339	403	0	#162	#892	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	743	1014	1583	143	265	1583	371	1476	1583	314	1415	1583
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	1.24	0.18	0.44	0.18	1.23	0.35	1.26	0.68	0.01	0.80	1.13	0.52

Intersection Summary

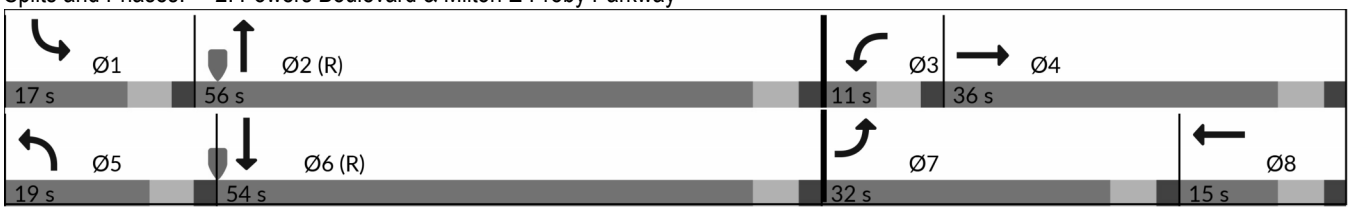
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay (s/veh): 74.2	Intersection LOS: E
Intersection Capacity Utilization 105.3%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	41	64	252	477	68	9	271	2507	593	15	1504	42
Future Volume (vph)	41	64	252	477	68	9	271	2507	593	15	1504	42
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			300			300			375			300
Lane Group Flow (vph)	45	70	274	518	74	10	295	2725	645	16	1635	46
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		21.0	21.0		19.0	77.0		11.0	69.0	
Total Split (%)	9.2%	9.2%		17.5%	17.5%		15.8%	64.2%		9.2%	57.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	15.0	17.2	120.0	12.8	77.6	120.0	5.0	63.2	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.13	0.14	1.00	0.11	0.65	1.00	0.04	0.53	1.00
v/c Ratio	0.31	0.90	0.17	1.20	0.14	0.00	0.81	1.19	0.40	0.21	0.87	0.02
Control Delay (s/veh)	61.8	137.1	0.2	163.3	73.4	0.0	70.1	113.4	0.7	62.9	31.7	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	0.0
Total Delay (s/veh)	61.8	137.1	0.2	163.3	73.4	0.0	70.1	113.4	0.7	62.9	31.7	0.0
LOS	E	F	A	F	E	A	E	F	A	E	C	A
Approach Delay (s/veh)		32.0			149.6			90.2			31.2	
Approach LOS		C			F			F			C	
Queue Length 50th (ft)	18	55	0	~259	31	0	116	~1285	0	12	566	0
Queue Length 95th (ft)	38	#149	0	m#340	m42	m0	#181	#1551	0	37	682	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	429	507	1583	371	2288	1583	73	1864	1583
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	0.31	0.91	0.17	1.21	0.15	0.01	0.80	1.19	0.41	0.22	0.88	0.03

Intersection Summary

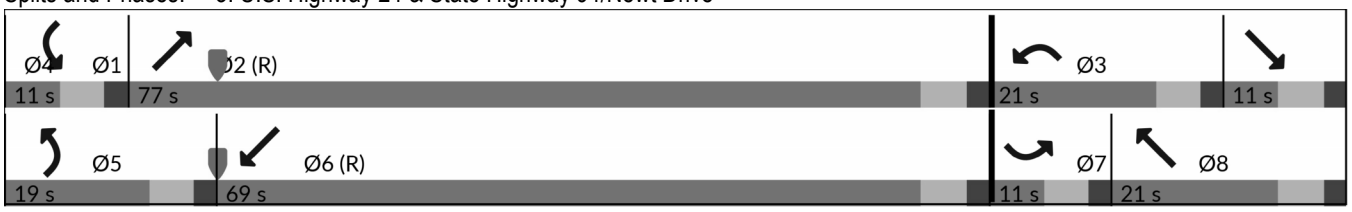
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay (s/veh): 76.5	Intersection LOS: E
Intersection Capacity Utilization 108.7%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	449	212	135	505	523	138	1567	42	206	917	18
Future Volume (vph)	3	449	212	135	505	523	138	1567	42	206	917	18
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.138			0.209			0.159			0.077		
Satd. Flow (perm)	257	1863	1583	389	1863	1583	296	3539	1583	143	3539	1583
Satd. Flow (RTOR)			203			169			82			82
Lane Group Flow (vph)	3	488	230	147	549	568	150	1703	46	224	997	20
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	17.0	58.0	58.0	15.0	56.0	56.0
Total Split (%)	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%	14.2%	48.3%	48.3%	12.5%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	61.8	52.5	52.5	60.2	51.7	51.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.52	0.44	0.44	0.50	0.43	0.43
v/c Ratio	0.03	0.76	0.34	1.11	0.86	0.87	0.55	1.10	0.06	1.16	0.65	0.02
Control Delay (s/veh)	32.0	46.3	8.8	150.5	52.1	41.2	21.0	88.3	1.1	143.2	29.7	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	0.0
Total Delay (s/veh)	32.0	46.3	8.8	150.5	52.1	41.2	21.0	88.3	1.1	143.2	29.7	0.0
LOS	C	D	A	F	D	D	C	F	A	F	C	A
Approach Delay (s/veh)		34.3			58.7			80.9			49.8	
Approach LOS		C			E			F			D	
Queue Length 50th (ft)	2	347	23	~130	395	305	54	~787	0	~156	319	0
Queue Length 95th (ft)	m3	m470	m79	#264	#590	#520	88	#927	6	#320	396	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	87	636	674	132	636	652	290	1548	738	193	1525	728
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	0.03	0.77	0.34	1.11	0.86	0.87	0.52	1.10	0.06	1.16	0.65	0.03

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

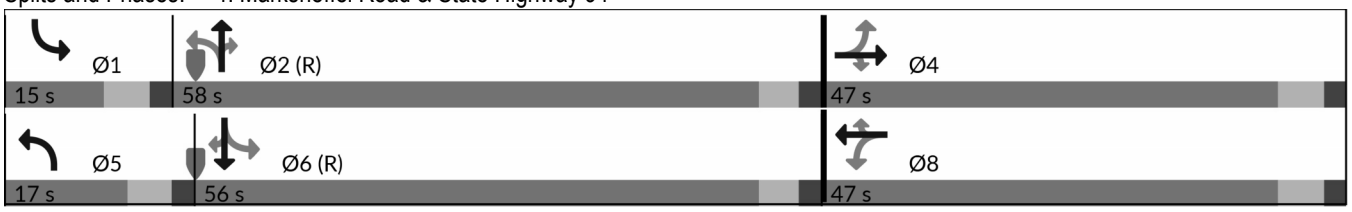
Intersection Signal Delay (s/veh): 61.3	Intersection LOS: E
Intersection Capacity Utilization 105.4%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	544	53	46	756	336	299	38	82	32	39	29
Future Volume (vph)	33	544	53	46	756	336	299	38	82	32	39	29
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.158			0.301			0.730			0.730		
Satd. Flow (perm)	294	1863	1583	561	1863	1583	1360	1863	1583	1360	1863	1583
Satd. Flow (RTOR)			82			365			89			82
Lane Group Flow (vph)	36	591	58	50	822	365	325	41	89	35	42	32
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	69.0	69.0	11.0	69.0	69.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	9.2%	57.5%	57.5%	9.2%	57.5%	57.5%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	71.7	67.5	67.5	72.9	69.9	69.9	31.5	31.5	31.5	31.5	31.5	31.5
Actuated g/C Ratio	0.60	0.56	0.56	0.61	0.58	0.58	0.26	0.26	0.26	0.26	0.26	0.26
v/c Ratio	0.15	0.56	0.06	0.12	0.75	0.33	0.91	0.08	0.18	0.09	0.08	0.06
Control Delay (s/veh)	10.4	20.8	1.5	8.2	19.6	1.6	72.8	32.4	7.5	32.9	32.4	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 (s/veh)	10.4	20.8	1.5	8.2	19.6	1.6	72.8	32.4	7.5	32.9	32.4	0.2
LOS	B	C	A	A	B	A	E	C	A	C	C	A
Approach Delay (s/veh)		18.7			13.9			56.4			23.2	
Approach LOS		B			B			E			C	
Queue Length 50th (ft)	10	306	0	11	475	16	237	23	0	20	24	0
Queue Length 95th (ft)	24	425	12	m13	m465	m6	#395	52	40	47	53	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	240	1047	926	394	1085	1074	385	527	512	385	527	507
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	0.15	0.56	0.06	0.13	0.76	0.34	0.84	0.08	0.17	0.09	0.08	0.06

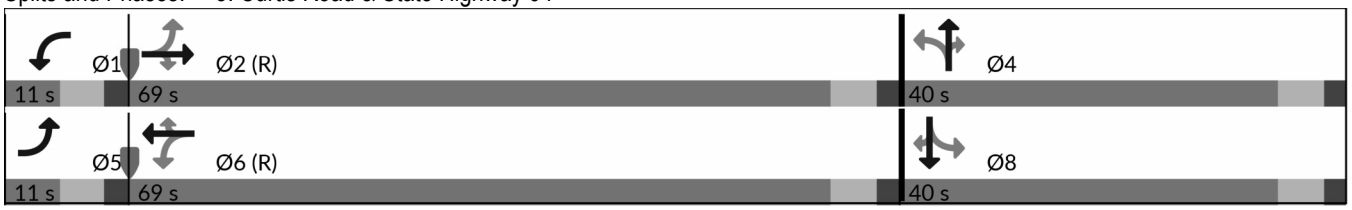
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 23.4	Intersection LOS: C
Intersection Capacity Utilization 75.5%	ICU Level of Service D
Analysis Period (min) 15	

\# 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	552	97	30	288	0	834	0	36	0	0	0
Future Volume (vph)	2	552	97	30	288	0	834	0	36	0	0	0
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	0	1770	1583	0	1863	1863
Flt Permitted	0.393			0.108				0.757				
Satd. Flow (perm)	732	1863	1583	201	1863	0	0	1410	1583	0	1863	1863
Satd. Flow (RTOR)			105						82			
Lane Group Flow (vph)	2	600	105	33	313	0	0	907	39	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm	NA	Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	43.0	43.0		43.0	43.0		77.0	77.0		77.0	77.0	77.0
Total Split (%)	35.8%	35.8%		35.8%	35.8%		64.2%	64.2%		64.2%	64.2%	64.2%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	37.0	37.0	120.0	37.0	37.0			71.0	120.0			
Actuated g/C Ratio	0.31	0.31	1.00	0.31	0.31			0.59	1.00			
v/c Ratio	0.00	1.04	0.06	0.54	0.54			1.08	0.02			
Control Delay (s/veh)	37.5	100.1	0.0	69.7	38.7			83.1	0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay (s/veh)	37.5	100.1	0.0	69.7	38.7			83.1	0.0			
LOS	D	F	A	E	D			F	A			
Approach Delay (s/veh)		85.1			41.7			79.7				
Approach LOS		F			D			E				
Queue Length 50th (ft)	1	~519	0	21	201			~790	0			
Queue Length 95th (ft)	m3	#751	0	#74	295			#1036	0			
Internal Link Dist (ft)		5250			516			7543			706	
Turn Bay Length (ft)	115		600	190					340			
Base Capacity (vph)	225	574	1583	61	574			834	1583			
Starvation Cap Reductn	0	0	0	0	0			0	0			
Spillback Cap Reductn	0	0	0	0	0			0	0			
Storage Cap Reductn	0	0	0	0	0			0	0			
Reduced v/c Ratio	0.01	1.05	0.07	0.54	0.55			1.09	0.02			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

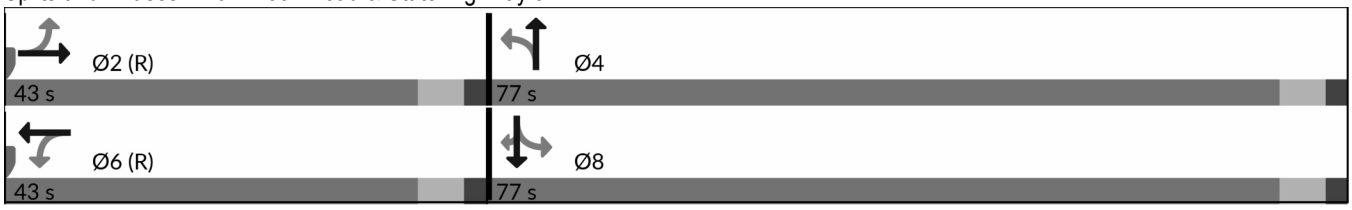
Intersection Signal Delay (s/veh): 75.0	Intersection LOS: E
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	547	299	12	17	20
Future Vol, veh/h	53	547	299	12	17	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	595	325	13	18	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	338	0	-	0	1041	332
Stage 1	-	-	-	-	332	-
Stage 2	-	-	-	-	710	-
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	1221	-	-	-	255	710
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	487	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1221	-	-	-	237	710
Mov Cap-2 Maneuver	-	-	-	-	237	-
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	487	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.71	0	15.91
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	159	-	-	-	370
HCM Lane V/C Ratio	0.047	-	-	-	0.109
HCM Control Delay (s/veh)	8.1	0	-	-	15.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	562	299	0	0	0
Future Vol, veh/h	2	562	299	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	611	325	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	325	0	-	0	940	325
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	615	-
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	1235	-	-	-	293	716
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1235	-	-	-	292	716
Mov Cap-2 Maneuver	-	-	-	-	292	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.03	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	6	-	-	-	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s/veh)	7.9	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	450	38	26	258	36	26	6	15	36	17	15
Future Vol, veh/h	30	450	38	26	258	36	26	6	15	36	17	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	489	41	28	280	39	28	7	16	39	18	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	320	0	0	530	0	0	921	951	510	914	952	300
Stage 1	-	-	-	-	-	-	575	575	-	357	357	-
Stage 2	-	-	-	-	-	-	346	376	-	558	596	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1240	-	-	1037	-	-	251	260	564	254	259	740
Stage 1	-	-	-	-	-	-	503	503	-	661	629	-
Stage 2	-	-	-	-	-	-	670	616	-	514	492	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1240	-	-	1037	-	-	216	246	564	228	246	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	216	246	-	228	246	-
Stage 1	-	-	-	-	-	-	490	489	-	643	612	-
Stage 2	-	-	-	-	-	-	618	600	-	480	479	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.46	0.7	21.12	22.88
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	274	1240	-	-	1037	-	-	275
HCM Lane V/C Ratio	0.186	0.026	-	-	0.027	-	-	0.269
HCM Control Delay (s/veh)	21.1	8	-	-	8.6	-	-	22.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	1.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	646	997	672	604	747	278
Future Volume (vph)	646	997	672	604	747	278
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.121	
Satd. Flow (perm)	3433	1583	3539	1583	225	3539
Satd. Flow (RTOR)		806		532		
Lane Group Flow (vph)	702	1084	730	657	812	302
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	31.0		33.0		56.0	89.0
Total Split (%)	25.8%		27.5%		46.7%	74.2%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	25.0	120.0	27.0	120.0	83.0	83.0
Actuated g/C Ratio	0.21	1.00	0.23	1.00	0.69	0.69
v/c Ratio	0.98	0.68	0.91	0.41	1.01	0.12
Control Delay (s/veh)	77.0	2.4	62.8	0.8	65.3	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	77.0	2.4	62.8	0.8	65.3	6.3
LOS	E	A	E	A	E	A
Approach Delay (s/veh)	31.8		33.5			49.4
Approach LOS	C		C			D
Queue Length 50th (ft)	281	0	292	0	~592	37
Queue Length 95th (ft)	#406	0	#405	0	#859	53
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	715	1583	796	1583	799	2447
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	0.98	0.68	0.92	0.42	1.02	0.12

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

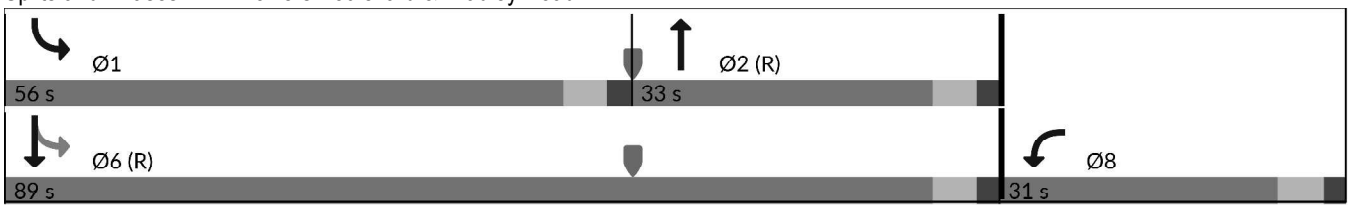
Maximum v/c Ratio: 1.02

Intersection Signal Delay (s/veh): 36.9	Intersection LOS: D
Intersection Capacity Utilization 93.4%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	579	261	460	5	105	110	775	1173	0	579	598	718
Future Volume (vph)	579	261	460	5	105	110	775	1173	0	579	598	718
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			500			300						682
Lane Group Flow (vph)	629	284	500	5	114	120	842	1275	0	629	650	780
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		39.0	51.0		29.0	41.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		32.5%	42.5%		24.2%	34.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	31.8	120.0	5.0	5.0	120.0	32.1	45.0		23.0	35.9	120.0
Actuated g/C Ratio	0.19	0.27	1.00	0.04	0.04	1.00	0.27	0.38		0.19	0.30	1.00
v/c Ratio	0.95	0.30	0.31	0.06	0.77	0.07	0.91	0.96		0.95	0.61	0.49
Control Delay (s/veh)	74.3	37.2	0.5	57.4	89.3	0.0	58.2	53.9		74.3	39.3	1.0
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 (s/veh)	74.3	37.2	0.5	57.4	89.3	0.0	58.2	53.9		74.3	39.3	1.0
LOS	E	D	A	E	F	A	E	D		E	D	A
Approach Delay (s/veh)		40.8			43.9			55.7			35.6	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	251	90	0	4	46	0	323	503		251	230	0
Queue Length 95th (ft)	#366	146	0	18	#97	0	#432	#656		#366	294	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	937	1583	73	147	1583	944	1327		657	1059	1583
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	0.30	0.32	0.07	0.78	0.08	0.89	0.96		0.96	0.61	0.49

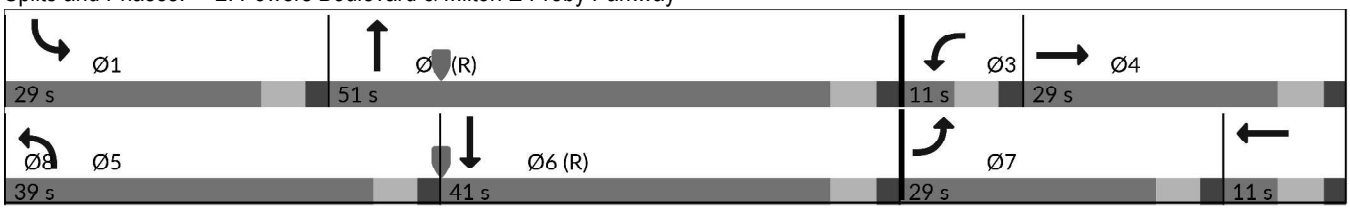
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 87.1%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	23	80	205	1134	35	93	146	783	970	62	1786	47
Future Volume (vph)	23	80	205	1134	35	93	146	783	970	62	1786	47
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			968			245
Lane Group Flow (vph)	25	87	223	1233	38	101	159	851	1054	67	1941	51
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		38.0	38.0		14.0	55.0		16.0	57.0	
Total Split (%)	9.2%	9.2%		31.7%	31.7%		11.7%	45.8%		13.3%	47.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		Max	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	32.0	36.4	120.0	8.0	52.6	120.0	8.9	51.0	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.27	0.30	1.00	0.07	0.44	1.00	0.07	0.43	1.00
v/c Ratio	0.17	1.12	0.14	1.34	0.03	0.06	1.34	0.54	0.66	0.51	1.29	0.03
Control Delay (s/veh)	58.4	193.4	0.1	201.1	40.7	0.0	244.5	27.5	2.2	67.2	167.0	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	0.0
Total Delay (s/veh)	58.4	193.4	0.1	201.1	40.7	0.0	244.5	27.5	2.2	67.2	167.0	0.0
LOS	E	F	A	F	D	A	F	C	A	E	F	A
Approach Delay (s/veh)		54.7			181.9			31.3			159.6	
Approach LOS		D			F			C			F	
Queue Length 50th (ft)	9	~78	0	~633	10	0	~161	265	0	50	~1008	0
Queue Length 95th (ft)	25	#186	0	m302	m7	m0	#301	332	0	99	#1146	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	915	1073	1583	118	1550	1583	147	1504	1583
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	0.17	1.13	0.14	1.35	0.04	0.06	1.35	0.55	0.67	0.46	1.29	0.03

Intersection Summary

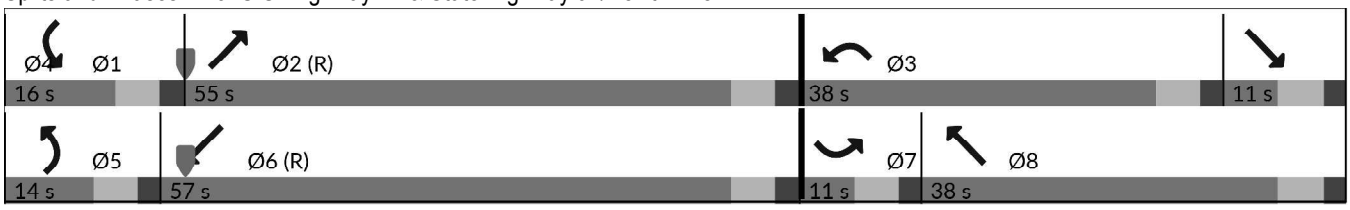
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay (s/veh): 113.4	Intersection LOS: F
Intersection Capacity Utilization 111.5%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	916	179	59	1185	245	83	639	75	435	1455	2
Future Volume (vph)	1	916	179	59	1185	245	83	639	75	435	1455	2
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.069			0.069			0.157			0.127		
Satd. Flow (perm)	129	1863	1583	129	1863	1583	292	3539	1583	237	3539	1583
Satd. Flow (RTOR)			132			134			136			82
Lane Group Flow (vph)	1	996	195	64	1288	266	90	695	82	473	1582	2
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	64.0	64.0	64.0	64.0	64.0	64.0	11.0	31.0	31.0	25.0	45.0	45.0
Total Split (%)	53.3%	53.3%	53.3%	53.3%	53.3%	53.3%	9.2%	25.8%	25.8%	20.8%	37.5%	37.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	58.0	58.0	58.0	58.0	58.0	58.0	30.0	25.5	25.5	50.0	39.5	39.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48	0.48	0.25	0.21	0.21	0.42	0.33	0.33
v/c Ratio	0.01	1.10	0.23	1.03	1.43	0.31	0.67	0.92	0.18	1.38	1.35	0.00
Control Delay (s/veh)	19.0	91.2	6.1	159.7	228.1	10.0	50.7	65.4	1.8	220.8	200.6	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	0.0
Total Delay (s/veh)	19.0	91.2	6.1	159.7	228.1	10.0	50.7	65.4	1.8	220.8	200.6	0.0
LOS	B	F	A	F	F	B	D	E	A	F	F	A
Approach Delay (s/veh)		77.3			189.6			57.9			205.1	
Approach LOS		E			F			E			F	
Queue Length 50th (ft)	1	~887	29	~53	~1350	56	42	279	0	~440	~847	0
Queue Length 95th (ft)	m0	m#1113	m75	#146	#1611	114	#95	#393	7	#651	#986	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	62	900	833	62	900	834	134	752	443	341	1164	576
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	0.02	1.11	0.23	1.03	1.43	0.32	0.67	0.92	0.19	1.39	1.36	0.00

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.43

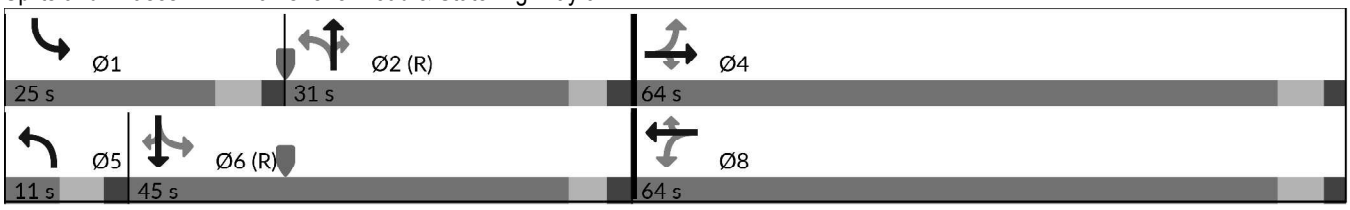
Intersection Signal Delay (s/veh): 151.9	Intersection LOS: F
Intersection Capacity Utilization 121.8%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1131	301	530	1412	127	60	32	282	346	188	28
Future Volume (vph)	14	1131	301	530	1412	127	60	32	282	346	188	28
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.071			0.065			0.455			0.734		
Satd. Flow (perm)	132	1863	1583	121	1863	1583	848	1863	1583	1367	1863	1583
Satd. Flow (RTOR)			172			113			278			136
Lane Group Flow (vph)	15	1229	327	576	1535	138	65	35	307	376	204	30
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	62.0	62.0	29.0	80.0	80.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	9.2%	51.7%	51.7%	24.2%	66.7%	66.7%	24.2%	24.2%	24.2%	24.2%	24.2%	24.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	61.0	56.0	56.0	85.0	80.6	80.6	23.0	23.0	23.0	23.0	23.0	23.0
Actuated g/C Ratio	0.51	0.47	0.47	0.71	0.67	0.67	0.19	0.19	0.19	0.19	0.19	0.19
v/c Ratio	0.11	1.41	0.39	1.43	1.22	0.12	0.40	0.09	0.58	1.43	0.57	0.07
Control Delay (s/veh)	10.0	221.6	10.8	228.1	124.9	2.7	51.0	40.9	11.9	252.5	51.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.0	221.6	10.8	228.1	124.9	2.7	51.0	40.9	11.9	252.5	51.1	0.3
LOS	A	F	B	F	F	A	D	D	B	F	D	A
Approach Delay (s/veh)		175.8			143.9			20.7			172.8	
Approach LOS		F			F			C			F	
Queue Length 50th (ft)	3	~1280	70	~566	~1417	9	45	23	19	~395	145	0
Queue Length 95th (ft)	9	#1541	140	m248	m576	m0	92	52	106	#588	226	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	135	869	830	401	1251	1100	162	357	528	262	357	413
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	0.11	1.41	0.39	1.44	1.23	0.13	0.40	0.10	0.58	1.44	0.57	0.07

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

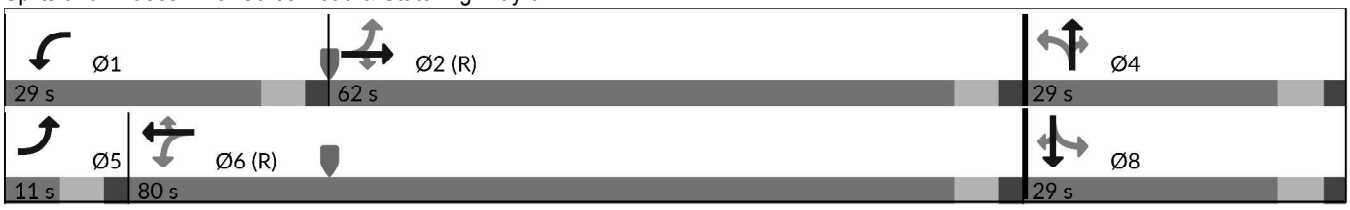
Intersection Signal Delay (s/veh): 147.5	Intersection LOS: F
Intersection Capacity Utilization 132.2%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	447	1319	60	879	0	1165	0	22	0	14	3
Future Volume (vph)	0	447	1319	60	879	0	1165	0	22	0	14	3
Satd. Flow (prot)	1863	1863	1583	1770	1863	0	1770	1863	1583	0	1863	1583
Flt Permitted				0.200			0.748					
Satd. Flow (perm)	1863	1863	1583	373	1863	0	1393	1863	1583	0	1863	1583
Satd. Flow (RTOR)			980						746			27
Lane Group Flow (vph)	0	486	1434	65	955	0	1266	0	24	0	15	3
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	46.0	46.0		46.0	46.0		74.0	74.0		74.0	74.0	74.0
Total Split (%)	38.3%	38.3%		38.3%	38.3%		61.7%	61.7%		61.7%	61.7%	61.7%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		40.0	120.0	40.0	40.0		68.0		120.0		68.0	68.0
Actuated g/C Ratio		0.33	1.00	0.33	0.33		0.57		1.00		0.57	0.57
v/c Ratio		0.78	0.90	0.52	1.53		1.60		0.01		0.01	0.00
Control Delay (s/veh)		41.3	13.7	50.2	280.6		302.1		0.0		11.4	0.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay (s/veh)		41.3	13.7	50.2	280.6		302.1		0.0		11.4	0.0
LOS		D	B	D	F		F		A		B	A
Approach Delay (s/veh)		20.8			265.9			296.5			9.5	
Approach LOS		C			F			F			A	
Queue Length 50th (ft)		398	552	40	~1039		~1404		0		5	0
Queue Length 95th (ft)		m309	m21	96	#1289		#1666		0		15	0
Internal Link Dist (ft)		5250			516			1547			706	
Turn Bay Length (ft)			600	190			200		340			100
Base Capacity (vph)		621	1583	124	621		789		1583		1055	908
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.78	0.91	0.52	1.54		1.60		0.02		0.01	0.00

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.60

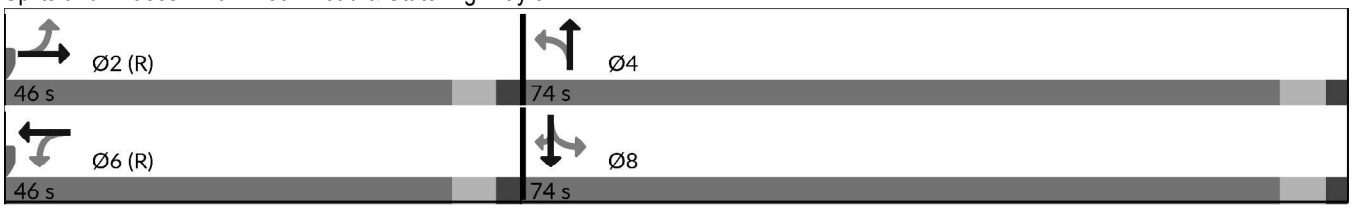
Intersection Signal Delay (s/veh): 163.3	Intersection LOS: F
Intersection Capacity Utilization 131.1%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	47.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	415	48	41	779	5	107	71	105	22	34	53
Future Vol, veh/h	3	415	48	41	779	5	107	71	105	22	34	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	100	-	100	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	451	52	45	847	5	116	77	114	24	37	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	852	0	0	503	0	0	1412	1399	451	1435	1448	849
Stage 1	-	-	-	-	-	-	458	458	-	939	939	-
Stage 2	-	-	-	-	-	-	954	941	-	496	510	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	787	-	-	1061	-	-	~ 116	141	608	111	131	361
Stage 1	-	-	-	-	-	-	583	567	-	317	343	-
Stage 2	-	-	-	-	-	-	311	342	-	556	538	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	787	-	-	1061	-	-	~ 66	134	608	38	125	361
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 66	134	-	38	125	-
Stage 1	-	-	-	-	-	-	580	564	-	304	328	-
Stage 2	-	-	-	-	-	-	222	327	-	387	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.06	0.42	209.38	188.48
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	66	134	608	13	-	-	1061	-	-	108
HCM Lane V/C Ratio	1.76	0.577	0.188	0.004	-	-	0.042	-	-	1.093
HCM Control Delay (s/veh)	$ 499.7	63.3	12.3	9.6	0	-	8.5	-	-	188.5
HCM Lane LOS	F	F	B	A	A	-	A	-	-	F
HCM 95th %tile Q(veh)	10.5	2.9	0.7	0	-	-	0.1	-	-	7.3

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

Intersection	
Int Delay, s/veh	123.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	296	245	107	462	0	350	0	172	0	0	1
Future Vol, veh/h	0	296	245	107	462	0	350	0	172	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	100	-	100	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	322	266	116	502	0	380	0	187	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	502	0	0	588	0	0	1057	1057	322	1057	1323	502
Stage 1	-	-	-	-	-	-	322	322	-	735	735	-
Stage 2	-	-	-	-	-	-	735	735	-	322	588	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1062	-	-	987	-	-	~ 203	225	719	203	156	569
Stage 1	-	-	-	-	-	-	690	651	-	411	426	-
Stage 2	-	-	-	-	-	-	411	426	-	690	496	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1062	-	-	987	-	-	~ 179	199	719	133	138	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 179	199	-	133	138	-
Stage 1	-	-	-	-	-	-	690	651	-	363	375	-
Stage 2	-	-	-	-	-	-	~ 362	375	-	511	496	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	1.72	$ 384.86	11.34
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	179	-	719	1062	-	-	987	-	-	569
HCM Lane V/C Ratio	2.128	-	0.26	-	-	-	0.118	-	-	0.002
HCM Control Delay (s/veh)	$ 568.2	0	11.8	0	-	-	9.1	-	-	11.3
HCM Lane LOS	F	A	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	30	-	1	0	-	-	0.4	-	-	0

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

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	99	270	102	16	414	41	82	14	16	19	10	75
Future Vol, veh/h	99	270	102	16	414	41	82	14	16	19	10	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	108	293	111	17	450	45	89	15	17	21	11	82

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	404	0	0	1054	1093	349	1023	1127	472
Stage 1	-	-	-	-	-	-	564	564	-	507	507	-
Stage 2	-	-	-	-	-	-	490	529	-	516	620	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1069	-	-	1154	-	-	204	214	694	214	205	592
Stage 1	-	-	-	-	-	-	510	508	-	548	539	-
Stage 2	-	-	-	-	-	-	560	527	-	542	480	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1069	-	-	1154	-	-	147	190	694	171	181	592
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	190	-	171	181	-
Stage 1	-	-	-	-	-	-	459	457	-	540	531	-
Stage 2	-	-	-	-	-	-	466	519	-	459	432	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.84	0.28	65.55	19.79
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	1069	-	-	1154	-	-	355
HCM Lane V/C Ratio	0.71	0.101	-	-	0.015	-	-	0.318
HCM Control Delay (s/veh)	65.6	8.7	-	-	8.2	-	-	19.8
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	4.3	0.3	-	-	0	-	-	1.3

Intersection	
Int Delay, s/veh	19.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	705	482	0	296	1097
Future Vol, veh/h	0	705	482	0	296	1097
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	766	524	0	322	1192

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1764	262	0	0	524	0
Stage 1	524	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
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	111	~ 737	-	-	1039	-
Stage 1	559	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	77	~ 737	-	-	1039	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	67.63	0	2.13
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	737	1039	-
HCM Lane V/C Ratio	-	-	1.04	0.31	-
HCM Control Delay (s/veh)	-	-	67.6	10	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	18.9	1.3	-

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

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	355	482	0	223	874
Future Vol, veh/h	0	355	482	0	223	874
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	386	524	0	242	950

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1484	262	0	0	524	0
Stage 1	524	-	-	-	-	-
Stage 2	960	-	-	-	-	-
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	116	737	-	-	1039	-
Stage 1	559	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	89	737	-	-	1039	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	255	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.13	0	1.93
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	737	1039	-
HCM Lane V/C Ratio	-	-	0.524	0.233	-
HCM Control Delay (s/veh)	-	-	15.1	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	3.1	0.9	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	669	825	351	852	776	711
Future Volume (vph)	669	825	351	852	776	711
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.290	
Satd. Flow (perm)	3433	1583	3539	1583	540	3539
Satd. Flow (RTOR)		789		479		
Lane Group Flow (vph)	727	897	382	926	843	773
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	35.0		23.0		62.0	85.0
Total Split (%)	29.2%		19.2%		51.7%	70.8%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	28.0	120.0	21.6	120.0	80.0	80.0
Actuated g/C Ratio	0.23	1.00	0.18	1.00	0.67	0.67
v/c Ratio	0.90	0.56	0.60	0.58	0.93	0.32
Control Delay (s/veh)	60.8	1.4	51.4	1.5	39.5	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.8	1.4	51.4	1.5	39.5	9.1
LOS	E	A	D	A	D	A
Approach Delay (s/veh)	28.0		16.2			25.0
Approach LOS	C		B			C
Queue Length 50th (ft)	280	0	151	0	484	126
Queue Length 95th (ft)	#380	0	#207	0	#770	159
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	829	1583	636	1583	933	2358
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	0.88	0.57	0.60	0.58	0.90	0.33

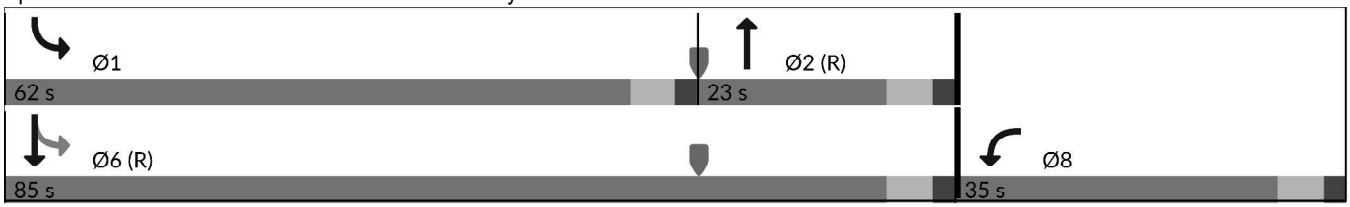
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 86.8%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	632	125	747	18	222	382	523	686	11	171	1090	566
Future Volume (vph)	632	125	747	18	222	382	523	686	11	171	1090	566
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			521			320			300			414
Lane Group Flow (vph)	687	136	812	20	241	415	568	746	12	186	1185	615
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	31.0	35.0		11.0	15.0		26.0	57.0		17.0	48.0	
Total Split (%)	25.8%	29.2%		9.2%	12.5%		21.7%	47.5%		14.2%	40.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	35.6	120.0	5.0	9.0	120.0	20.0	51.6	120.0	10.4	42.0	120.0
Actuated g/C Ratio	0.21	0.30	1.00	0.04	0.08	1.00	0.17	0.43	1.00	0.09	0.35	1.00
v/c Ratio	0.96	0.12	0.51	0.27	0.90	0.26	0.99	0.49	0.00	0.62	0.95	0.38
Control Delay (s/veh)	72.6	32.8	1.1	65.3	91.5	0.4	86.1	26.2	0.0	62.6	55.6	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 (s/veh)	72.6	32.8	1.1	65.3	91.5	0.4	86.1	26.2	0.0	62.6	55.6	0.7
LOS	E	C	A	E	F	A	F	C	A	E	E	A
Approach Delay (s/veh)		33.9			34.8			51.6			39.3	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	273	38	0	15	99	0	228	217	0	72	468	0
Queue Length 95th (ft)	#393	72	0	42	#178	0	#347	275	0	111	#616	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	715	1049	1583	73	265	1583	572	1521	1583	314	1238	1583
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	0.96	0.13	0.51	0.27	0.91	0.26	0.99	0.49	0.01	0.59	0.96	0.39

Intersection Summary

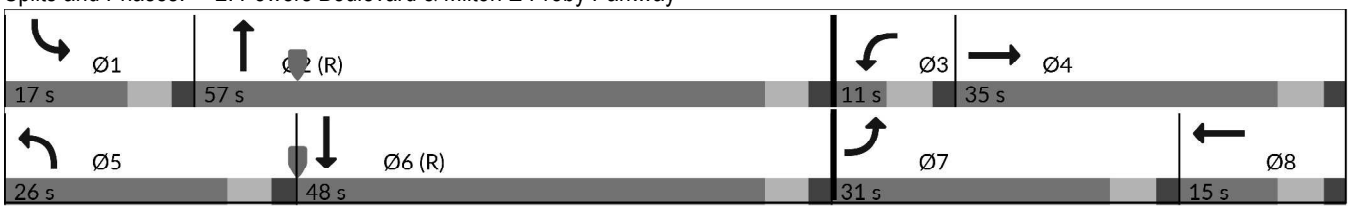
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 40.1	Intersection LOS: D
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	47	187	900	51	74	202	1863	1153	100	1117	32
Future Volume (vph)	30	47	187	900	51	74	202	1863	1153	100	1117	32
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	1770	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			300			300			976			300
Lane Group Flow (vph)	33	51	203	978	55	80	220	2025	1253	109	1214	35
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		33.0	33.0		21.0	65.0		11.0	55.0	
Total Split (%)	9.2%	9.2%		27.5%	27.5%		17.5%	54.2%		9.2%	45.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	27.0	29.2	120.0	16.0	59.0	120.0	7.2	50.2	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.23	0.24	1.00	0.13	0.49	1.00	0.06	0.42	1.00
v/c Ratio	0.23	0.66	0.12	1.26	0.06	0.05	0.93	1.16	0.79	1.02	0.81	0.02
Control Delay (s/veh)	59.7	94.1	0.1	172.7	48.1	0.0	96.2	110.2	4.1	152.4	36.8	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	0.0
Total Delay (s/veh)	59.7	94.1	0.1	172.7	48.1	0.0	96.2	110.2	4.1	152.4	36.8	0.0
LOS	E	F	A	F	D	A	F	F	A	F	D	A
Approach Delay (s/veh)		23.7			154.2			71.3			45.2	
Approach LOS		C			F			E			D	
Queue Length 50th (ft)	12	40	0	~486	18	0	173	~980	0	~116	438	0
Queue Length 95th (ft)	30	#105	0	m#477	m18	m0	#336	#1117	0	#236	534	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	772	861	1583	235	1740	1583	106	1481	1583
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	0.23	0.66	0.13	1.27	0.06	0.05	0.94	1.16	0.79	1.03	0.82	0.02

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

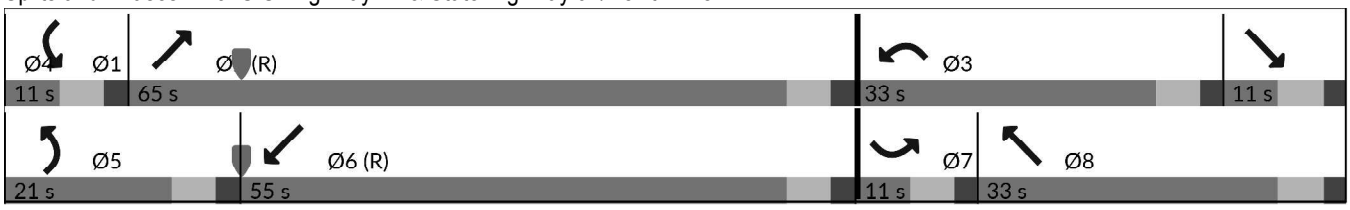
Intersection Signal Delay (s/veh): 78.2	Intersection LOS: E
Intersection Capacity Utilization 104.4%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1135	158	100	988	457	102	1164	32	242	681	14
Future Volume (vph)	2	1135	158	100	988	457	102	1164	32	242	681	14
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.060			0.060			0.152			0.131		
Satd. Flow (perm)	112	1863	1583	112	1863	1583	283	3539	1583	244	3539	1583
Satd. Flow (RTOR)			100			168			82			82
Lane Group Flow (vph)	2	1234	172	109	1074	497	111	1265	35	263	740	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	73.0	73.0	73.0	73.0	73.0	73.0	11.0	33.0	33.0	14.0	36.0	36.0
Total Split (%)	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	9.2%	27.5%	27.5%	11.7%	30.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	67.0	67.0	67.0	67.0	67.0	67.0	32.0	27.5	27.5	38.0	30.5	30.5
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.56	0.56	0.27	0.23	0.23	0.32	0.25	0.25
v/c Ratio	0.03	1.18	0.18	1.75	1.03	0.51	0.81	1.55	0.08	1.46	0.82	0.03
Control Delay (s/veh)	14.5	118.1	6.3	422.5	63.7	12.5	72.1	290.7	0.3	266.4	51.0	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	0.0
Total Delay (s/veh)	14.5	118.1	6.3	422.5	63.7	12.5	72.1	290.7	0.3	266.4	51.0	0.1
LOS	B	F	A	F	E	B	E	F	A	F	D	A
Approach Delay (s/veh)		104.3			71.9			266.3			105.9	
Approach LOS		F			E			F			F	
Queue Length 50th (ft)	1	~1162	35	~125	~893	147	60	~728	0	~231	285	0
Queue Length 95th (ft)	m1	m#1404	m53	#199	#1147	238	#134	#866	0	#403	361	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	62	1040	928	62	1040	958	137	811	425	179	899	463
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	0.03	1.19	0.19	1.76	1.03	0.52	0.81	1.56	0.08	1.47	0.82	0.03

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.76

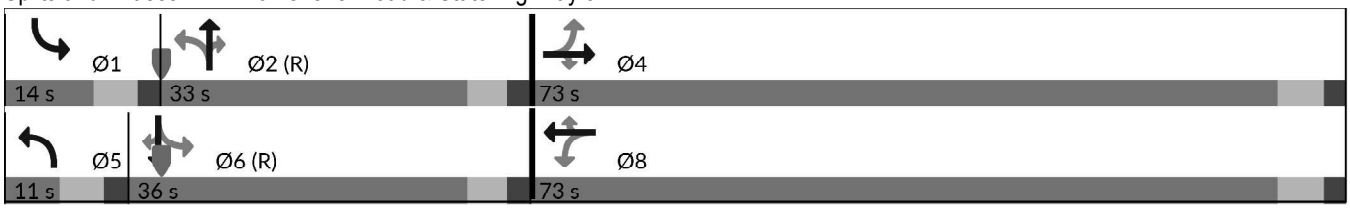
Intersection Signal Delay (s/veh): 136.2	Intersection LOS: F
Intersection Capacity Utilization 130.4%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1295	39	374	1243	318	222	28	506	113	29	21
Future Volume (vph)	25	1295	39	374	1243	318	222	28	506	113	29	21
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.059			0.054			0.736			0.738		
Satd. Flow (perm)	110	1863	1583	101	1863	1583	1371	1863	1583	1375	1863	1583
Satd. Flow (RTOR)			136			346			161			136
Lane Group Flow (vph)	27	1408	42	407	1351	346	241	30	550	123	32	23
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	74.0	74.0	21.0	84.0	84.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	9.2%	61.7%	61.7%	17.5%	70.0%	70.0%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	73.0	68.0	68.0	89.0	82.4	82.4	19.0	19.0	19.0	19.0	19.0	19.0
Actuated g/C Ratio	0.61	0.57	0.57	0.74	0.69	0.69	0.16	0.16	0.16	0.16	0.16	0.16
v/c Ratio	0.19	1.33	0.04	1.43	1.05	0.28	1.11	0.10	1.42	0.56	0.10	0.06
Control Delay (s/veh)	9.3	182.9	0.0	231.9	47.7	0.5	140.4	44.3	232.7	57.9	44.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	182.9	0.0	231.9	47.7	0.5	140.4	44.3	232.7	57.9	44.4	0.3
LOS	A	F	A	F	D	A	F	D	F	E	D	A
Approach Delay (s/veh)		174.6			75.6			198.8			48.1	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	5	~1419	0	~377	~1227	0	~214	20	~467	89	22	0
Queue Length 95th (ft)	12	#1681	0	m162	m418	m0	#378	49	#688	155	52	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	136	1055	955	283	1278	1195	217	294	386	217	294	365
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	1.33	0.04	1.44	1.06	0.29	1.11	0.10	1.42	0.57	0.11	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

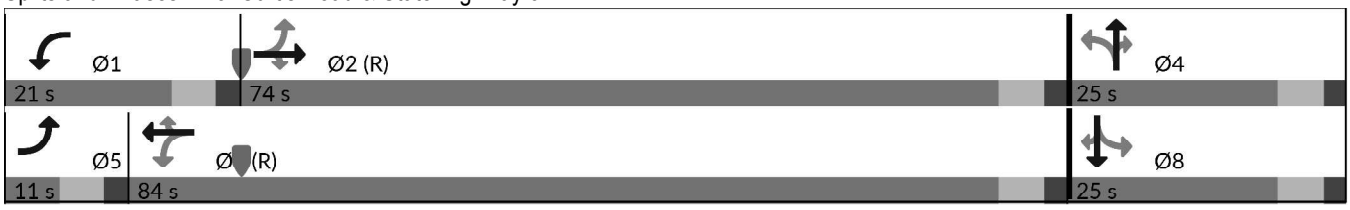
Intersection Signal Delay (s/veh): 128.5	Intersection LOS: F
Intersection Capacity Utilization 122.8%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	790	1117	25	526	0	1394	0	29	0	0	0
Future Volume (vph)	1	790	1117	25	526	0	1394	0	29	0	0	0
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	1770	1863	1583	0	1863	1863
Flt Permitted	0.114			0.114			0.757					
Satd. Flow (perm)	212	1863	1583	212	1863	0	1410	1863	1583	0	1863	1863
Satd. Flow (RTOR)			1051						744			
Lane Group Flow (vph)	1	859	1214	27	572	0	1515	0	32	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	41.0	41.0		41.0	41.0		79.0	79.0		79.0	79.0	79.0
Total Split (%)	34.2%	34.2%		34.2%	34.2%		65.8%	65.8%		65.8%	65.8%	65.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	35.0	35.0	120.0	35.0	35.0		73.0		120.0			
Actuated g/C Ratio	0.29	0.29	1.00	0.29	0.29		0.61		1.00			
v/c Ratio	0.01	1.58	0.76	0.44	1.05		1.76		0.02			
Control Delay (s/veh)	29.0	291.3	3.0	60.4	94.8		372.5		0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)	29.0	291.3	3.0	60.4	94.8		372.5		0.0			
LOS	C	F	A	E	F		F		A			
Approach Delay (s/veh)		122.5			93.3			364.8				
Approach LOS		F			F			F				
Queue Length 50th (ft)	0	~977	23	17	~484		~1751		0			
Queue Length 95th (ft)	m0	m#637	m0	#58	#703		#2015		0			
Internal Link Dist (ft)		5250			516			1536			706	
Turn Bay Length (ft)	115		600	190			200		340			
Base Capacity (vph)	61	543	1583	61	543		857		1583			
Starvation Cap Reductn	0	0	0	0	0		0		0			
Spillback Cap Reductn	0	0	0	0	0		0		0			
Storage Cap Reductn	0	0	0	0	0		0		0			
Reduced v/c Ratio	0.02	1.58	0.77	0.44	1.05		1.77		0.02			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.77

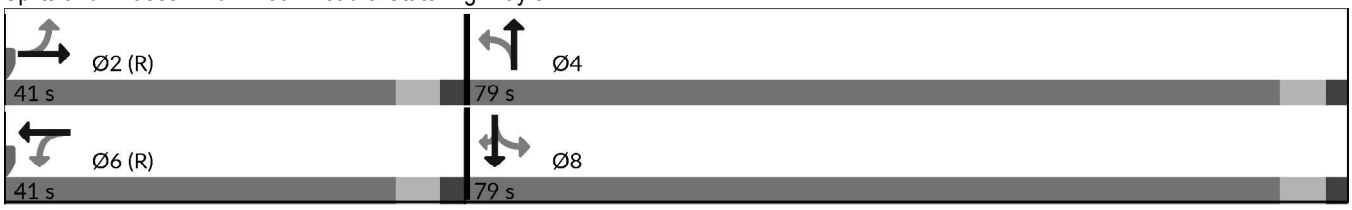
Intersection Signal Delay (s/veh): 207.2	Intersection LOS: F
Intersection Capacity Utilization 128.8%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	943.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	691	98	102	462	9	74	51	69	33	68	15
Future Vol, veh/h	39	691	98	102	462	9	74	51	69	33	68	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	751	107	111	502	10	80	55	75	36	74	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	512	0	0	858	0	0	1597	1570	751	1592	1671	507
Stage 1	-	-	-	-	-	-	836	836	-	729	729	-
Stage 2	-	-	-	-	-	-	761	734	-	864	942	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1053	-	-	783	-	-	86	111	411	87	96	566
Stage 1	-	-	-	-	-	-	362	382	-	414	428	-
Stage 2	-	-	-	-	-	-	398	426	-	349	341	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1053	-	-	783	-	-	~ 2	88	411	~ 24	76	566
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 2	88	-	~ 24	76	-
Stage 1	-	-	-	-	-	-	333	352	-	356	368	-
Stage 2	-	-	-	-	-	-	265	366	-	222	315	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	1.84	$ 7795.53	$ 865.19
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	2	88	411	96	-	-	783	-	-	50
HCM Lane V/C Ratio	38.753	0.633	0.183	0.04	-	-	0.142	-	-	2.521
HCM Control Delay (s/veh)	$ 20353.5	99.8	15.7	8.6	0	-	10.4	-	-	$ 865.2
HCM Lane LOS	F	F	C	A	A	-	B	-	-	F
HCM 95th %tile Q(veh)	12.3	3	0.7	0.1	-	-	0.5	-	-	13.1

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

Intersection	
Int Delay, s/veh	111.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	489	303	163	326	0	257	0	133	0	0	0
Future Vol, veh/h	1	489	303	163	326	0	257	0	133	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	532	329	177	354	0	279	0	145	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	354	0	0	861	0	0	1242	1242	532	1242	1572	354
Stage 1	-	-	-	-	-	-	534	534	-	709	709	-
Stage 2	-	-	-	-	-	-	709	709	-	534	863	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	781	-	-	~ 151	175	548	151	110	689
Stage 1	-	-	-	-	-	-	530	525	-	425	437	-
Stage 2	-	-	-	-	-	-	425	437	-	530	372	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	781	-	-	~ 117	135	548	86	85	689
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 117	135	-	86	85	-
Stage 1	-	-	-	-	-	-	529	524	-	329	338	-
Stage 2	-	-	-	-	-	-	329	338	-	389	371	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	3.65	$ 473.17	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	117	-	548	4	-	-	781	-	-	-
HCM Lane V/C Ratio	2.391	-	0.264	0.001	-	-	0.227	-	-	-
HCM Control Delay (s/veh)	$ 710.8	0	13.9	8	0	-	11	-	-	0
HCM Lane LOS	F	A	B	A	A	-	B	-	-	A
HCM 95th %tile Q(veh)	24.6	-	1.1	0	-	-	0.9	-	-	-

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

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	91	402	96	19	280	27	105	5	11	27	12	100
Future Vol, veh/h	91	402	96	19	280	27	105	5	11	27	12	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	99	437	104	21	304	29	114	5	12	29	13	109

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	334	0	0	541	0	0	1039	1062	489	998	1099	319
Stage 1	-	-	-	-	-	-	687	687	-	360	360	-
Stage 2	-	-	-	-	-	-	352	375	-	638	739	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1226	-	-	1027	-	-	209	223	579	223	212	722
Stage 1	-	-	-	-	-	-	437	447	-	658	626	-
Stage 2	-	-	-	-	-	-	665	617	-	465	424	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1226	-	-	1027	-	-	150	201	579	192	191	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	201	-	192	191	-
Stage 1	-	-	-	-	-	-	402	411	-	645	614	-
Stage 2	-	-	-	-	-	-	541	605	-	413	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.27	0.5	83.86	19.02
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	162	1226	-	-	1027	-	-	406
HCM Lane V/C Ratio	0.81	0.081	-	-	0.02	-	-	0.372
HCM Control Delay (s/veh)	83.9	8.2	-	-	8.6	-	-	19
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	5.4	0.3	-	-	0.1	-	-	1.7

Intersection	
Int Delay, s/veh	38.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	480	943	0	683	459
Future Vol, veh/h	0	480	943	0	683	459
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	522	1025	0	742	499

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2759	513	0	0	1025	0
Stage 1	1025	-	-	-	-	-
Stage 2	1734	-	-	-	-	-
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	15	~ 507	-	-	~ 673	-
Stage 1	307	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	0	~ 507	-	-	~ 673	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	76.6	0	53.83
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	~ 673	-
HCM Lane V/C Ratio	-	-	1.03	1.103	-
HCM Control Delay (s/veh)	-	-	76.6	90	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	15	21.6	-

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

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	297	943	0	364	95
Future Vol, veh/h	0	297	943	0	364	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	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	323	1025	0	396	103

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1868	513	0	0	1025	0
Stage 1	1025	-	-	-	-	-
Stage 2	843	-	-	-	-	-
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	64	507	-	-	673	-
Stage 1	307	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	507	-	-	673	-
Mov Cap-2 Maneuver	26	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	158	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.76	0	14.03
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	673	-
HCM Lane V/C Ratio	-	-	0.637	0.588	-
HCM Control Delay (s/veh)	-	-	23.8	17.7	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	4.4	3.9	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	783	1215	905	731	894	374
Future Volume (vph)	783	1215	905	731	894	374
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.108	
Satd. Flow (perm)	3433	1583	3539	1583	201	3539
Satd. Flow (RTOR)		761		512		
Lane Group Flow (vph)	851	1321	984	795	972	407
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	29.0		37.0		54.0	91.0
Total Split (%)	24.2%		30.8%		45.0%	75.8%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	23.0	120.0	31.0	120.0	85.0	85.0
Actuated g/C Ratio	0.19	1.00	0.26	1.00	0.71	0.71
v/c Ratio	1.29	0.83	1.07	0.50	1.26	0.16
Control Delay (s/veh)	183.4	5.3	95.0	1.1	157.6	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	183.4	5.3	95.0	1.1	157.6	5.9
LOS	F	A	F	A	F	A
Approach Delay (s/veh)	75.1		53.1			112.8
Approach LOS	E		D			F
Queue Length 50th (ft)	~433	0	~446	0	~900	48
Queue Length 95th (ft)	#559	0	#579	0	#1156	66
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	657	1583	914	1583	769	2506
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	1.30	0.83	1.08	0.50	1.26	0.16

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

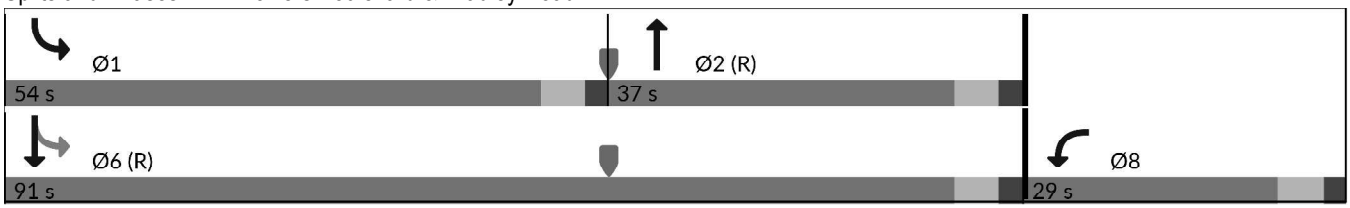
Maximum v/c Ratio: 1.30

Intersection Signal Delay (s/veh): 77.5	Intersection LOS: E
Intersection Capacity Utilization 111.9%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	779	352	567	6	141	149	947	1579	0	779	802	967
Future Volume (vph)	779	352	567	6	141	149	947	1579	0	779	802	967
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			616			300						628
Lane Group Flow (vph)	847	383	616	7	153	162	1029	1716	0	847	872	1051
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		43.0	51.0		29.0	37.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		35.8%	42.5%		24.2%	30.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	31.8	120.0	5.0	5.0	120.0	37.0	45.0		23.0	31.0	120.0
Actuated g/C Ratio	0.19	0.27	1.00	0.04	0.04	1.00	0.31	0.38		0.19	0.26	1.00
v/c Ratio	1.28	0.40	0.38	0.04	1.04	0.10	0.97	1.29		1.28	0.95	0.66
Control Delay (s/veh)	180.9	38.8	0.7	56.0	140.9	0.1	63.1	170.5		180.9	64.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	180.9	38.8	0.7	56.0	140.9	0.1	63.1	170.5		180.9	64.6	2.2
LOS	F	D	A	E	F	A	E	F		F	E	A
Approach Delay (s/veh)		91.3			68.2			130.3			76.5	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~430	125	0	2	~67	0	405	~892		~430	351	0
Queue Length 95th (ft)	#555	194	0	10	#139	0	#545	#1032		#555	#481	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	937	1583	143	147	1583	1058	1327		657	914	1583
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	1.29	0.41	0.39	0.05	1.04	0.10	0.97	1.29		1.29	0.95	0.66

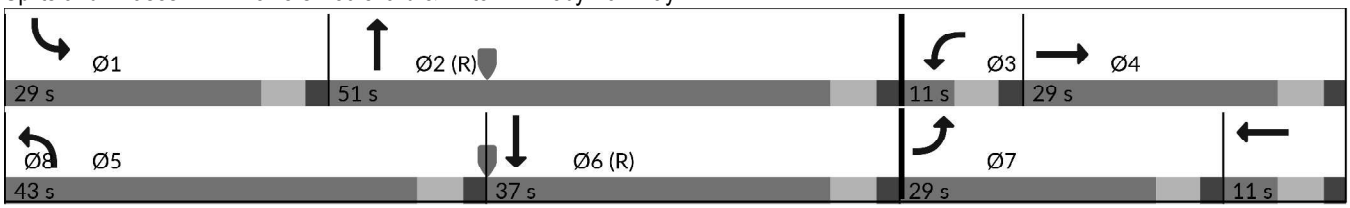
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay (s/veh): 98.9	Intersection LOS: F
Intersection Capacity Utilization 112.3%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	108	275	1271	47	94	197	1054	1167	67	2404	64
Future Volume (vph)	30	108	275	1271	47	94	197	1054	1167	67	2404	64
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			980			245
Lane Group Flow (vph)	33	117	299	1382	51	102	214	1146	1268	73	2613	70
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		36.0	36.0		11.0	60.0		13.0	62.0	
Total Split (%)	9.2%	9.2%		30.0%	30.0%		9.2%	50.0%		10.8%	51.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	30.0	34.4	120.0	5.0	56.6	120.0	7.0	56.0	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.25	0.29	1.00	0.04	0.47	1.00	0.06	0.47	1.00
v/c Ratio	0.23	1.51	0.18	1.61	0.05	0.06	1.49	0.68	0.80	0.70	1.58	0.04
Control Delay (s/veh)	59.7	327.5	0.2	312.5	40.8	0.0	295.4	28.1	4.3	90.4	291.8	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	0.0
Total Delay (s/veh)	59.7	327.5	0.2	312.5	40.8	0.0	295.4	28.1	4.3	90.4	291.8	0.0
LOS	E	F	A	F	D	A	F	C	A	F	F	A
Approach Delay (s/veh)		89.9			282.8			38.4			279.1	
Approach LOS		F			F			D			F	
Queue Length 50th (ft)	12	~126	0	~779	12	0	~118	372	0	57	~1516	0
Queue Length 95th (ft)	30	#249	0	m#292	m7	m0	#198	454	0	#134	#1646	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	858	1014	1583	143	1669	1583	103	1651	1583
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	0.23	1.52	0.19	1.61	0.05	0.06	1.50	0.69	0.80	0.71	1.58	0.04

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.61

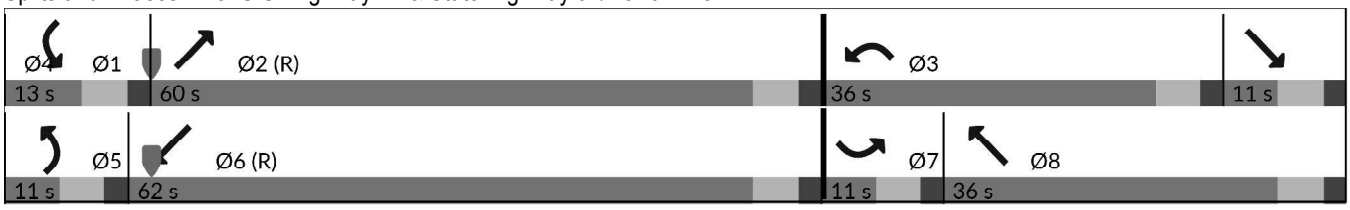
Intersection Signal Delay (s/veh): 182.5	Intersection LOS: F
Intersection Capacity Utilization 130.0%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1079	241	79	1307	298	112	859	102	568	1958	3
Future Volume (vph)	2	1079	241	79	1307	298	112	859	102	568	1958	3
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.075			0.075			0.140			0.116		
Satd. Flow (perm)	140	1863	1583	140	1863	1583	261	3539	1583	216	3539	1583
Satd. Flow (RTOR)			132			137			136			82
Lane Group Flow (vph)	2	1173	262	86	1421	324	122	934	111	617	2128	3
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	59.0	59.0	59.0	59.0	59.0	59.0	11.0	34.0	34.0	27.0	50.0	50.0
Total Split (%)	49.2%	49.2%	49.2%	49.2%	49.2%	49.2%	9.2%	28.3%	28.3%	22.5%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	53.0	53.0	53.0	53.0	53.0	53.0	33.0	28.5	28.5	55.0	44.5	44.5
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.44	0.28	0.24	0.24	0.46	0.37	0.37
v/c Ratio	0.03	1.42	0.33	1.40	1.72	0.41	0.91	1.11	0.23	1.66	1.62	0.00
Control Delay (s/veh)	21.0	224.8	10.4	287.6	358.8	14.5	85.2	108.9	4.6	338.7	311.9	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	0.0
Total Delay (s/veh)	21.0	224.8	10.4	287.6	358.8	14.5	85.2	108.9	4.6	338.7	311.9	0.0
LOS	C	F	B	F	F	B	F	F	A	F	F	A
Approach Delay (s/veh)		185.5			294.6			96.6			317.6	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	1	~1243	74	~89	~1627	93	54	~435	0	~651	~1248	0
Queue Length 95th (ft)	m1	m#1436	m109	#152	#1892	168	#161	#566	30	#881	#1385	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	61	822	772	61	822	775	134	840	479	370	1312	638
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	0.03	1.43	0.34	1.41	1.73	0.42	0.91	1.11	0.23	1.67	1.62	0.00

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.73

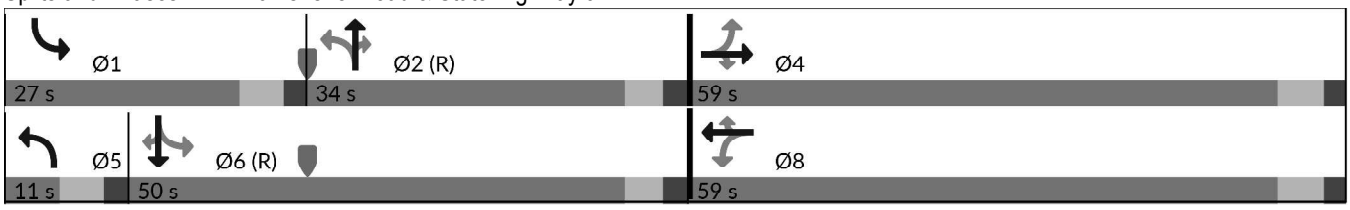
Intersection Signal Delay (s/veh): 249.4	Intersection LOS: F
Intersection Capacity Utilization 143.7%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1350	406	553	1579	139	80	42	293	449	253	38
Future Volume (vph)	18	1350	406	553	1579	139	80	42	293	449	253	38
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.070			0.063			0.328			0.727		
Satd. Flow (perm)	130	1863	1583	117	1863	1583	611	1863	1583	1354	1863	1583
Satd. Flow (RTOR)			136			106			228			136
Lane Group Flow (vph)	20	1467	441	601	1716	151	87	46	318	488	275	41
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	63.0	63.0	26.0	78.0	78.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	9.2%	52.5%	52.5%	21.7%	65.0%	65.0%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	62.0	57.0	57.0	83.0	78.6	78.6	25.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.52	0.48	0.48	0.69	0.66	0.66	0.21	0.21	0.21	0.21	0.21	0.21
v/c Ratio	0.14	1.65	0.53	1.68	1.40	0.14	0.68	0.11	0.62	1.73	0.70	0.09
Control Delay (s/veh)	10.7	327.6	17.5	337.6	206.2	3.6	71.9	39.6	18.6	373.6	55.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.7	327.6	17.5	337.6	206.2	3.6	71.9	39.6	18.6	373.6	55.2	0.4
LOS	B	F	B	F	F	A	E	D	B	F	E	A
Approach Delay (s/veh)		253.4			225.8			31.1			245.8	
Approach LOS		F			F			C			F	
Queue Length 50th (ft)	4	~1651	160	~654	~1739	14	63	29	59	~559	199	0
Queue Length 95th (ft)	12	#1916	257	m#241	m650	m2	#146	63	160	#769	297	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	135	884	823	356	1220	1073	127	388	510	282	388	437
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	0.15	1.66	0.54	1.69	1.41	0.14	0.69	0.12	0.62	1.73	0.71	0.09

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.73

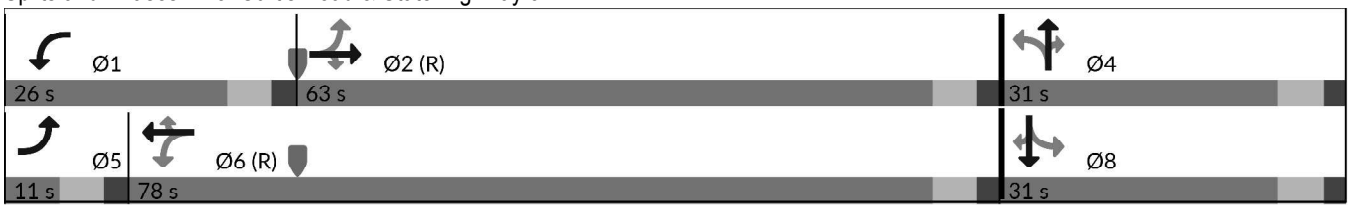
Intersection Signal Delay (s/veh): 222.5	Intersection LOS: F
Intersection Capacity Utilization 150.7%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	505	1597	80	1038	0	1201	0	30	0	18	5
Future Volume (vph)	0	505	1597	80	1038	0	1201	0	30	0	18	5
Satd. Flow (prot)	1863	1863	1583	1770	1863	0	1770	1863	1583	0	1863	1583
Flt Permitted				0.174			0.744					
Satd. Flow (perm)	1863	1863	1583	324	1863	0	1386	1863	1583	0	1863	1583
Satd. Flow (RTOR)			944						708			27
Lane Group Flow (vph)	0	549	1736	87	1128	0	1305	0	33	0	20	5
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	50.0	50.0		50.0	50.0		70.0	70.0		70.0	70.0	70.0
Total Split (%)	41.7%	41.7%		41.7%	41.7%		58.3%	58.3%		58.3%	58.3%	58.3%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		44.0	120.0	44.0	44.0		64.0		120.0		64.0	64.0
Actuated g/C Ratio		0.37	1.00	0.37	0.37		0.53		1.00		0.53	0.53
v/c Ratio		0.80	1.09	0.73	1.65		1.76		0.02		0.02	0.00
Control Delay (s/veh)		41.2	63.1	70.0	327.9		373.8		0.0		13.3	0.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay (s/veh)		41.2	63.1	70.0	327.9		373.8		0.0		13.3	0.0
LOS		D	E	E	F		F		A		B	A
Approach Delay (s/veh)		57.9			309.5			364.7			10.7	
Approach LOS		E			F			F			B	
Queue Length 50th (ft)		452	~946	58	~1268		~1508		0		7	0
Queue Length 95th (ft)		m289	m28	#153	#1526		#1769		0		19	0
Internal Link Dist (ft)		5250			516			1536			706	
Turn Bay Length (ft)			600	190			200		340			100
Base Capacity (vph)		683	1583	118	683		739		1583		993	856
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.80	1.10	0.74	1.65		1.77		0.02		0.02	0.01

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.77

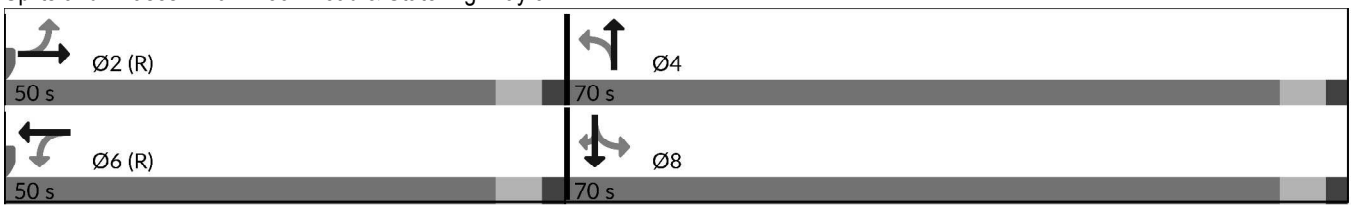
Intersection Signal Delay (s/veh): 204.9	Intersection LOS: F
Intersection Capacity Utilization 147.0%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	128

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	478	48	41	942	6	107	71	105	24	0	105
Future Vol, veh/h	5	478	48	41	942	6	107	71	105	24	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	520	52	45	1024	7	116	77	114	26	0	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1030	0	0	572	0	0	1643	1650	520	1685	1699	1027
Stage 1	-	-	-	-	-	-	530	530	-	1116	1116	-
Stage 2	-	-	-	-	-	-	1113	1120	-	569	583	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	674	-	-	1001	-	-	~ 80	99	556	74	92	285
Stage 1	-	-	-	-	-	-	532	526	-	252	283	-
Stage 2	-	-	-	-	-	-	253	282	-	507	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	674	-	-	1001	-	-	~ 45	93	556	~ 10	87	285
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 45	93	-	~ 10	87	-
Stage 1	-	-	-	-	-	-	526	520	-	241	270	-
Stage 2	-	-	-	-	-	-	145	269	-	339	493	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0.36	$ 381.41	$ 1077.11
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	45	93	556	19	-	-	1001	-	-	47
HCM Lane V/C Ratio	2.581	0.828	0.205	0.008	-	-	0.045	-	-	2.983
HCM Control Delay (s/veh)	$ 909.1	130.8	13.1	10.4	0	-	8.8	-	-	$ 1077.1
HCM Lane LOS	F	F	B	B	A	-	A	-	-	F
HCM 95th %tile Q(veh)	12.4	4.5	0.8	0	-	-	0.1	-	-	15.1

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

Intersection	
Int Delay, s/veh	201.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	362	245	107	607	0	350	0	105	0	0	2
Future Vol, veh/h	0	362	245	107	607	0	350	0	105	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	393	266	116	660	0	380	0	114	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	660	0	0	660	0	0	1286	1286	393	1286	1552	660
Stage 1	-	-	-	-	-	-	393	393	-	892	892	-
Stage 2	-	-	-	-	-	-	892	892	-	393	660	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	928	-	-	928	-	-	~ 141	164	655	141	113	463
Stage 1	-	-	-	-	-	-	631	606	-	336	360	-
Stage 2	-	-	-	-	-	-	~ 336	360	-	631	460	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	928	-	-	928	-	-	~ 123	144	655	102	99	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 123	144	-	102	99	-
Stage 1	-	-	-	-	-	-	631	606	-	294	315	-
Stage 2	-	-	-	-	-	-	~ 293	315	-	521	460	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	1.41	$ 785.15	12.81
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	123	-	655	928	-	-	928	-	-	463
HCM Lane V/C Ratio	3.092	-	0.174	-	-	-	0.125	-	-	0.005
HCM Control Delay (s/veh)	$ 1017.2	0	11.6	0	-	-	9.4	-	-	12.8
HCM Lane LOS	F	A	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	36.1	-	0.6	0	-	-	0.4	-	-	0

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

Intersection	
Int Delay, s/veh	27.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	101	331	106	21	540	55	92	18	21	26	14	83
Future Vol, veh/h	101	331	106	21	540	55	92	18	21	26	14	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	360	115	23	587	60	100	20	23	28	15	90

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	647	0	0	475	0	0	1277	1329	417	1252	1357	617
Stage 1	-	-	-	-	-	-	637	637	-	663	663	-
Stage 2	-	-	-	-	-	-	640	692	-	589	695	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	939	-	-	1087	-	-	143	155	635	149	149	490
Stage 1	-	-	-	-	-	-	465	471	-	451	459	-
Stage 2	-	-	-	-	-	-	464	445	-	494	444	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	939	-	-	1087	-	-	~ 91	134	635	108	129	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 91	134	-	108	129	-
Stage 1	-	-	-	-	-	-	411	416	-	441	449	-
Stage 2	-	-	-	-	-	-	358	436	-	401	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.75	0.29	253.5	38.08
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	939	-	-	1087	-	-	237
HCM Lane V/C Ratio	1.286	0.117	-	-	0.021	-	-	0.563
HCM Control Delay (s/veh)	253.5	9.3	-	-	8.4	-	-	38.1
HCM Lane LOS	F	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	9.6	0.4	-	-	0.1	-	-	3.1

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

Intersection	
Int Delay, s/veh	20.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	705	526	0	296	1399
Future Vol, veh/h	0	705	526	0	296	1399
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	766	572	0	322	1521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1976	286	0	0	572	0
Stage 1	572	-	-	-	-	-
Stage 2	1404	-	-	-	-	-
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	83	~ 711	-	-	997	-
Stage 1	528	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	56	~ 711	-	-	997	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	242	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	80.16	0	1.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	711	997	-
HCM Lane V/C Ratio	-	-	1.078	0.323	-
HCM Control Delay (s/veh)	-	-	80.2	10.3	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	20.8	1.4	-

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

Intersection	
Int Delay, s/veh	378.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	355	0	526	0	223	1176
Future Vol, veh/h	355	0	526	0	223	1176
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	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	386	0	572	0	242	1278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1696	286	0	0	572	0
Stage 1	572	-	-	-	-	-
Stage 2	1124	-	-	-	-	-
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	~ 84	711	-	-	997	-
Stage 1	528	-	-	-	-	-
Stage 2	~ 272	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 63	711	-	-	997	-
Mov Cap-2 Maneuver	~ 63	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	~ 206	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/veh	$ 2423.91	0	1.56
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	63	997	-
HCM Lane V/C Ratio	-	-	6.102	0.243	-
HCM Control Delay (s/veh)	-	-	$ 2423.9	9.8	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	43.6	1	-

Notes

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

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	813	982	473	1056	910	956
Future Volume (vph)	813	982	473	1056	910	956
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.167	
Satd. Flow (perm)	3433	1583	3539	1583	311	3539
Satd. Flow (RTOR)		772		467		
Lane Group Flow (vph)	884	1067	514	1148	989	1039
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	34.0		24.0		62.0	86.0
Total Split (%)	28.3%		20.0%		51.7%	71.7%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	28.0	120.0	18.0	120.0	80.0	80.0
Actuated g/C Ratio	0.23	1.00	0.15	1.00	0.67	0.67
v/c Ratio	1.10	0.67	0.96	0.72	1.11	0.44
Control Delay (s/veh)	106.9	2.3	83.2	2.9	93.3	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	106.9	2.3	83.2	2.9	93.3	10.1
LOS	F	A	F	A	F	B
Approach Delay (s/veh)	49.7		27.8			50.7
Approach LOS	D		C			D
Queue Length 50th (ft)	~401	0	211	0	~829	182
Queue Length 95th (ft)	#528	0	#322	0	#1085	224
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	801	1583	530	1583	888	2359
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	1.10	0.67	0.97	0.73	1.11	0.44

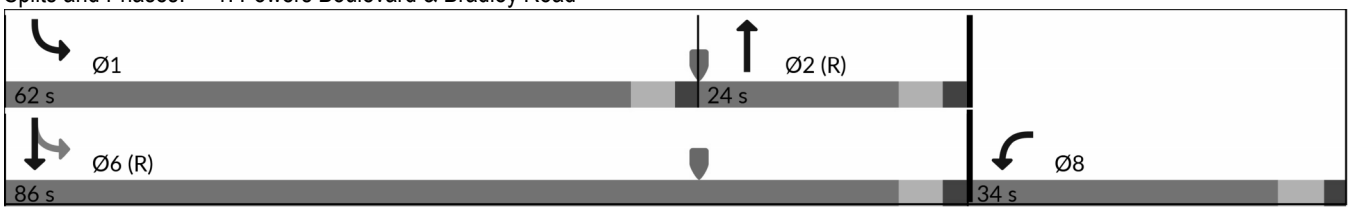
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay (s/veh): 43.6	Intersection LOS: D
Intersection Capacity Utilization 101.7%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	850	168	913	24	299	514	633	923	15	230	1467	762
Future Volume (vph)	850	168	913	24	299	514	633	923	15	230	1467	762
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			499			311			245			414
Lane Group Flow (vph)	924	183	992	26	325	559	688	1003	16	250	1595	828
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	31.0	35.0		11.0	15.0		24.0	54.0		20.0	50.0	
Total Split (%)	25.8%	29.2%		9.2%	12.5%		20.0%	45.0%		16.7%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	33.4	120.0	5.0	9.0	120.0	18.0	49.1	120.0	12.9	44.0	120.0
Actuated g/C Ratio	0.21	0.28	1.00	0.04	0.08	1.00	0.15	0.41	1.00	0.11	0.37	1.00
v/c Ratio	1.29	0.18	0.62	0.18	1.22	0.35	1.33	0.69	0.01	0.67	1.22	0.52
Control Delay (s/veh)	180.7	34.9	1.8	58.5	176.5	0.6	204.8	32.5	0.0	61.1	144.5	1.2
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 (s/veh)	180.7	34.9	1.8	58.5	176.5	0.6	204.8	32.5	0.0	61.1	144.5	1.2
LOS	F	C	A	E	F	A	F	C	A	E	F	A
Approach Delay (s/veh)		83.5			65.1			101.7			92.4	
Approach LOS		F			E			F			F	
Queue Length 50th (ft)	~470	60	0	10	~163	0	~357	337	0	96	~802	0
Queue Length 95th (ft)	#598	92	0	25	#258	0	#477	415	0	140	#942	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	715	985	1583	143	265	1583	514	1447	1583	400	1297	1583
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	1.29	0.19	0.63	0.18	1.23	0.35	1.34	0.69	0.01	0.63	1.23	0.52

Intersection Summary

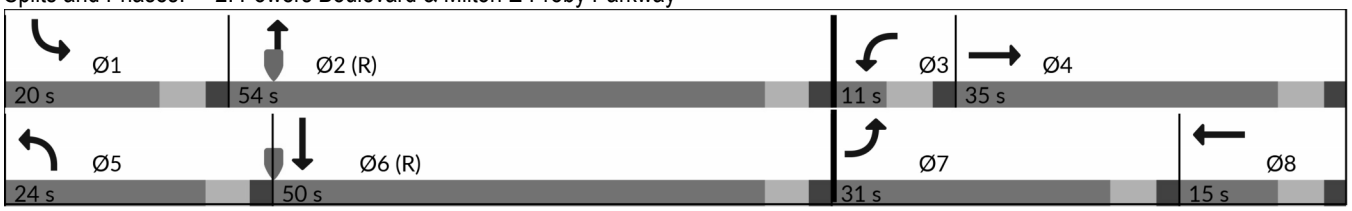
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.34

Intersection Signal Delay (s/veh): 88.7	Intersection LOS: F
Intersection Capacity Utilization 111.1%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	41	64	252	1022	68	77	271	2507	1306	104	1504	42
Future Volume (vph)	41	64	252	1022	68	77	271	2507	1306	104	1504	42
Satd. Flow (prot)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	3433	3539	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			245			245			826			245
Lane Group Flow (vph)	45	70	274	1111	74	84	295	2725	1420	113	1635	46
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		32.0	32.0		16.0	65.0		12.0	61.0	
Total Split (%)	9.2%	9.2%		26.7%	26.7%		13.3%	54.2%		10.0%	50.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	26.0	28.2	120.0	10.0	59.0	120.0	6.0	55.0	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.22	0.24	1.00	0.08	0.49	1.00	0.05	0.46	1.00
v/c Ratio	0.31	0.90	0.17	1.49	0.08	0.05	1.03	1.56	0.89	1.28	1.00	0.02
Control Delay (s/veh)	61.8	137.1	0.2	265.8	49.1	0.0	115.1	283.8	9.2	235.0	57.0	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	0.0
Total Delay (s/veh)	61.8	137.1	0.2	265.8	49.1	0.0	115.1	283.8	9.2	235.0	57.0	0.0
LOS	E	F	A	F	D	A	F	F	A	F	E	A
Approach Delay (s/veh)		32.0			235.6			184.8			66.8	
Approach LOS		C			F			F			E	
Queue Length 50th (ft)	18	55	0	~609	23	0	~126	~1573	0	~111	~665	0
Queue Length 95th (ft)	38	#149	0	m#441	m19	m0	#217	#1701	#2	#232	#837	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	743	831	1583	286	1740	1583	88	1622	1583
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	0.31	0.91	0.17	1.50	0.09	0.05	1.03	1.57	0.90	1.28	1.01	0.03

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.57

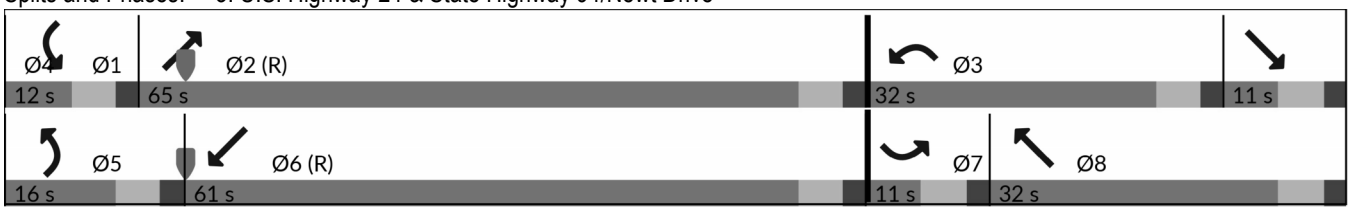
Intersection Signal Delay (s/veh): 158.6	Intersection LOS: F
Intersection Capacity Utilization 125.9%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1251	212	135	1118	591	138	1567	42	295	917	18
Future Volume (vph)	3	1251	212	135	1118	591	138	1567	42	295	917	18
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.065			0.065			0.127			0.116		
Satd. Flow (perm)	121	1863	1583	121	1863	1583	237	3539	1583	216	3539	1583
Satd. Flow (RTOR)			111			175			82			82
Lane Group Flow (vph)	3	1360	230	147	1215	642	150	1703	46	321	997	20
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	68.0	68.0	68.0	68.0	68.0	68.0	12.0	37.0	37.0	15.0	40.0	40.0
Total Split (%)	56.7%	56.7%	56.7%	56.7%	56.7%	56.7%	10.0%	30.8%	30.8%	12.5%	33.3%	33.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	62.0	62.0	62.0	62.0	62.0	62.0	37.0	31.5	31.5	43.0	34.5	34.5
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52	0.31	0.26	0.26	0.36	0.29	0.29
v/c Ratio	0.04	1.41	0.26	2.37	1.26	0.71	1.00	1.83	0.09	1.66	0.98	0.03
Control Delay (s/veh)	17.3	216.2	8.6	683.3	154.7	20.7	107.8	408.0	2.0	344.0	66.5	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 (s/veh)	17.3	216.2	8.6	683.3	154.7	20.7	107.8	408.0	2.0	344.0	66.5	0.1
LOS	B	F	A	F	F	C	F	F	A	F	E	A
Approach Delay (s/veh)		185.9			150.6			374.5			132.1	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	1	~1434	59	~140	~1183	272	~78	~1050	0	~314	403	0
Queue Length 95th (ft)	m1	m#1638	m69	#276	#1442	420	#204	#1190	8	#499	#546	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	62	962	871	62	962	902	149	928	476	193	1017	513
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	0.05	1.41	0.26	2.37	1.26	0.71	1.01	1.84	0.10	1.66	0.98	0.04

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.37

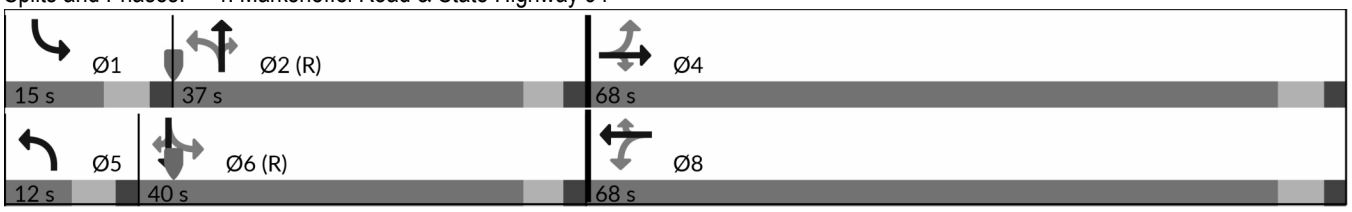
Intersection Signal Delay (s/veh): 217.4	Intersection LOS: F
Intersection Capacity Utilization 152.6%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1435	53	386	1437	404	299	38	527	121	39	29
Future Volume (vph)	33	1435	53	386	1437	404	299	38	527	121	39	29
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.063			0.062			0.730			0.730		
Satd. Flow (perm)	117	1863	1583	115	1863	1583	1360	1863	1583	1360	1863	1583
Satd. Flow (RTOR)			82			284			98			82
Lane Group Flow (vph)	36	1560	58	420	1562	439	325	41	573	132	42	32
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	69.0	69.0	11.0	69.0	69.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	9.2%	57.5%	57.5%	9.2%	57.5%	57.5%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	68.0	63.0	63.0	70.4	67.4	67.4	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.57	0.53	0.53	0.59	0.56	0.56	0.28	0.28	0.28	0.28	0.28	0.28
v/c Ratio	0.26	1.59	0.06	3.08	1.49	0.43	0.84	0.07	1.10	0.34	0.07	0.06
Control Delay (s/veh)	14.2	297.8	1.5	957.6	244.7	2.7	61.2	32.1	105.7	37.2	32.2	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 (s/veh)	14.2	297.8	1.5	957.6	244.7	2.7	61.2	32.1	105.7	37.2	32.2	0.2
LOS	B	F	A	F	F	A	E	C	F	D	C	A
Approach Delay (s/veh)		281.3			324.6			87.1			30.5	
Approach LOS		F			F			F			C	
Queue Length 50th (ft)	10	~1726	0	~527	~1775	21	237	23	~448	81	24	0
Queue Length 95th (ft)	24	#1991	12	m#250	m637	m1	#395	52	#673	140	53	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	135	978	870	136	1046	1013	385	527	518	385	527	507
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	0.27	1.60	0.07	3.09	1.49	0.43	0.84	0.08	1.11	0.34	0.08	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.09

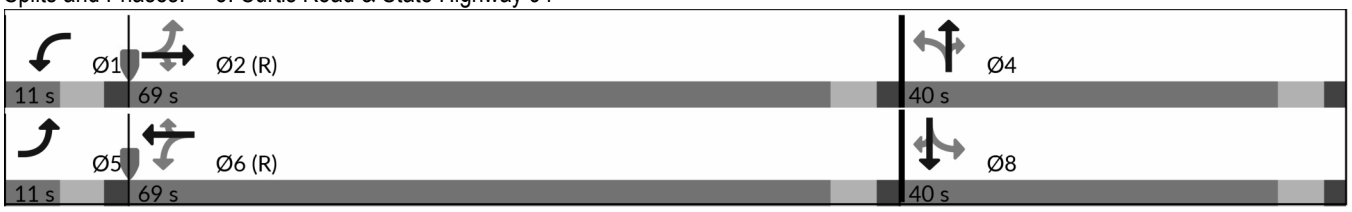
Intersection Signal Delay (s/veh): 256.5	Intersection LOS: F
Intersection Capacity Utilization 135.1%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	932	1142	32	600	0	1609	0	38	0	0	0
Future Volume (vph)	2	932	1142	32	600	0	1609	0	38	0	0	0
Satd. Flow (prot)	1770	1863	1583	1770	1863	0	1770	1863	1583	0	1863	1863
Flt Permitted	0.103			0.103			0.757					
Satd. Flow (perm)	192	1863	1583	192	1863	0	1410	1863	1583	0	1863	1863
Satd. Flow (RTOR)			919						703			
Lane Group Flow (vph)	2	1013	1241	35	652	0	1749	0	41	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	45.0	45.0		45.0	45.0		75.0	75.0		75.0	75.0	75.0
Total Split (%)	37.5%	37.5%		37.5%	37.5%		62.5%	62.5%		62.5%	62.5%	62.5%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	39.0	39.0	120.0	39.0	39.0		69.0		120.0			
Actuated g/C Ratio	0.33	0.33	1.00	0.33	0.33		0.58		1.00			
v/c Ratio	0.03	1.67	0.78	0.56	1.07		2.15		0.02			
Control Delay (s/veh)	27.5	332.1	3.9	71.1	98.3		546.1		0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)	27.5	332.1	3.9	71.1	98.3		546.1		0.0			
LOS	C	F	A	E	F		F		A			
Approach Delay (s/veh)		151.3			97.0			533.6				
Approach LOS		F			F			F				
Queue Length 50th (ft)	1	~1162	44	22	~563		~2166		0			
Queue Length 95th (ft)	m0	m#708	m0	#77	#792		#2430		0			
Internal Link Dist (ft)		5250			516			1506			706	
Turn Bay Length (ft)	115		600	190					340			
Base Capacity (vph)	62	605	1583	62	605		810		1583			
Starvation Cap Reductn	0	0	0	0	0		0		0			
Spillback Cap Reductn	0	0	0	0	0		0		0			
Storage Cap Reductn	0	0	0	0	0		0		0			
Reduced v/c Ratio	0.03	1.67	0.78	0.56	1.08		2.16		0.03			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.16

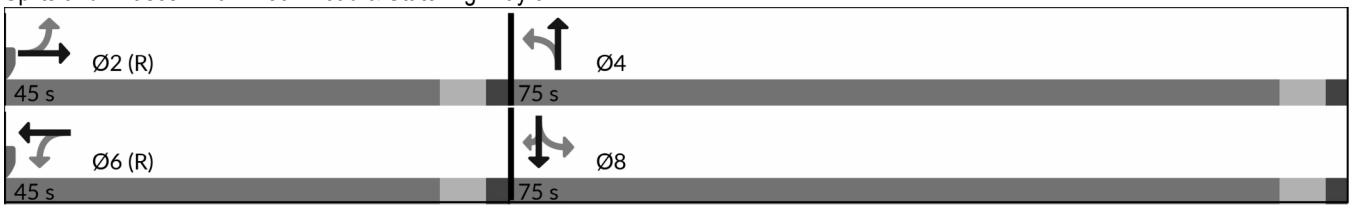
Intersection Signal Delay (s/veh): 288.0	Intersection LOS: F
Intersection Capacity Utilization 148.2%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Intersection	
Int Delay, s/veh	63

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	831	98	102	539	12	74	51	69	38	0	88
Future Vol, veh/h	53	831	98	102	539	12	74	51	69	38	0	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	903	107	111	586	13	80	55	75	41	0	96

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	599	0	0	1010	0	0	1826	1839	903	1860	1939	592
Stage 1	-	-	-	-	-	-	1018	1018	-	814	814	-
Stage 2	-	-	-	-	-	-	808	821	-	1046	1125	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	978	-	-	686	-	-	~ 59	75	336	56	65	506
Stage 1	-	-	-	-	-	-	286	315	-	372	391	-
Stage 2	-	-	-	-	-	-	375	389	-	276	280	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	978	-	-	686	-	-	~ 35	~ 55	336	~ 31	47	506
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 35	~ 55	-	~ 31	47	-
Stage 1	-	-	-	-	-	-	247	271	-	312	328	-
Stage 2	-	-	-	-	-	-	255	326	-	147	242	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.48	1.76	$ 394.94	$ 355.87
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	35	55	336	108	-	-	686	-	-	91
HCM Lane V/C Ratio	2.315	1.016	0.223	0.059	-	-	0.162	-	-	1.502
HCM Control Delay (s/veh)	$ 846.7	248.4	18.8	8.9	0	-	11.3	-	-	$ 355.9
HCM Lane LOS	F	F	C	A	A	-	B	-	-	F
HCM 95th %tile Q(veh)	9	4.6	0.8	0.2	-	-	0.6	-	-	10.6

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

Intersection	
Int Delay, s/veh	188.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	633	303	163	406	0	257	0	69	0	0	0
Future Vol, veh/h	2	633	303	163	406	0	257	0	69	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	-	200	-	200	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	688	329	177	441	0	279	0	75	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	441	0	0	1017	0	0	1488	1488	688	1488	1817	441
Stage 1	-	-	-	-	-	-	692	692	-	796	796	-
Stage 2	-	-	-	-	-	-	796	796	-	692	1022	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1119	-	-	682	-	-	~ 102	124	446	102	78	616
Stage 1	-	-	-	-	-	-	434	445	-	381	399	-
Stage 2	-	-	-	-	-	-	381	399	-	434	314	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1119	-	-	682	-	-	~ 75	91	446	63	57	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 75	91	-	63	57	-
Stage 1	-	-	-	-	-	-	432	443	-	282	295	-
Stage 2	-	-	-	-	-	-	282	295	-	359	312	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	3.47	$ 1053.77	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	75	-	446	6	-	-	682	-	-	-
HCM Lane V/C Ratio	3.706	-	0.168	0.002	-	-	0.26	-	-	-
HCM Control Delay (s/veh)	$ 1332.7	0	14.7	8.2	0	-	12.1	-	-	0
HCM Lane LOS	F	A	B	A	A	-	B	-	-	A
HCM 95th %tile Q(veh)	29.1	-	0.6	0	-	-	1	-	-	-

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

Intersection	
Int Delay, s/veh	35.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	518	106	26	347	36	115	6	15	36	17	104
Future Vol, veh/h	98	518	106	26	347	36	115	6	15	36	17	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	107	563	115	28	377	39	125	7	16	39	18	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	416	0	0	678	0	0	1277	1307	621	1233	1345	397
Stage 1	-	-	-	-	-	-	834	834	-	453	453	-
Stage 2	-	-	-	-	-	-	443	473	-	779	891	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1143	-	-	914	-	-	143	160	488	154	152	653
Stage 1	-	-	-	-	-	-	363	383	-	586	570	-
Stage 2	-	-	-	-	-	-	594	558	-	389	361	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1143	-	-	914	-	-	~ 91	140	488	125	133	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 91	140	-	125	133	-
Stage 1	-	-	-	-	-	-	329	348	-	568	552	-
Stage 2	-	-	-	-	-	-	460	541	-	334	327	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.15	0.58	$ 323.79	37.79
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	102	1143	-	-	914	-	-	273
HCM Lane V/C Ratio	1.449	0.093	-	-	0.031	-	-	0.624
HCM Control Delay (s/veh)	$ 323.8	8.5	-	-	9.1	-	-	37.8
HCM Lane LOS	F	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	10.8	0.3	-	-	0.1	-	-	3.8

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

Intersection	
Int Delay, s/veh	74.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	480	1167	0	683	491
Future Vol, veh/h	0	480	1167	0	683	491
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	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	522	1268	0	742	534

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3020	634	0	0	1268	0
Stage 1	1268	-	-	-	-	-
Stage 2	1752	-	-	-	-	-
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	9	~ 422	-	-	~ 544	-
Stage 1	228	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	0	~ 422	-	-	~ 544	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	154.1	0	115.21
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	~ 544	-
HCM Lane V/C Ratio	-	-	1.237	1.366	-
HCM Control Delay (s/veh)	-	-	154.1	198	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	21.6	33.2	-

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

Intersection	
Int Delay, s/veh	10.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	297	1167	0	364	127
Future Vol, veh/h	0	297	1167	0	364	127
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	323	1268	0	396	138

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2129	634	0	0	1268	0
Stage 1	1268	-	-	-	-	-
Stage 2	860	-	-	-	-	-
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	43	422	-	-	544	-
Stage 1	228	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	12	422	-	-	544	-
Mov Cap-2 Maneuver	12	-	-	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	102	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	36.44	0	20.26
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	544	-
HCM Lane V/C Ratio	-	-	0.766	0.728	-
HCM Control Delay (s/veh)	-	-	36.4	27.3	-
HCM Lane LOS	-	-	E	D	-
HCM 95th %tile Q(veh)	-	-	6.4	6	-

APPENDIX D

Capacity Worksheets – Mitigated Scenarios

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	646	997	672	604	747	278
Future Volume (vph)	646	997	672	604	747	278
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.121	
Satd. Flow (perm)	3433	1583	3539	1583	225	3539
Satd. Flow (RTOR)		806		532		
Lane Group Flow (vph)	702	1084	730	657	812	302
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	31.0		33.0		56.0	89.0
Total Split (%)	25.8%		27.5%		46.7%	74.2%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	25.0	120.0	27.0	120.0	83.0	83.0
Actuated g/C Ratio	0.21	1.00	0.23	1.00	0.69	0.69
v/c Ratio	0.98	0.68	0.91	0.41	1.01	0.12
Control Delay (s/veh)	77.0	2.4	62.8	0.8	65.3	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	77.0	2.4	62.8	0.8	65.3	6.3
LOS	E	A	E	A	E	A
Approach Delay (s/veh)	31.8		33.5			49.4
Approach LOS	C		C			D
Queue Length 50th (ft)	281	0	292	0	~592	37
Queue Length 95th (ft)	#406	0	#405	0	#859	53
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	715	1583	796	1583	799	2447
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	0.98	0.68	0.92	0.42	1.02	0.12

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

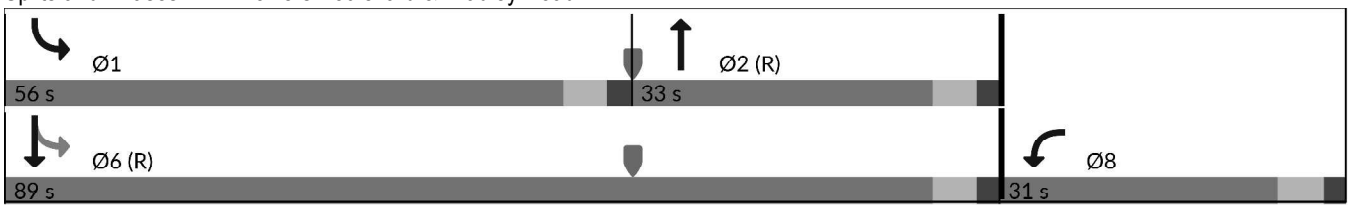
Maximum v/c Ratio: 1.02

Intersection Signal Delay (s/veh): 36.9	Intersection LOS: D
Intersection Capacity Utilization 93.4%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	579	261	460	5	105	110	775	1173	0	579	598	718
Future Volume (vph)	579	261	460	5	105	110	775	1173	0	579	598	718
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			500			300						682
Lane Group Flow (vph)	629	284	500	5	114	120	842	1275	0	629	650	780
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		39.0	51.0		29.0	41.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		32.5%	42.5%		24.2%	34.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	31.8	120.0	5.0	5.0	120.0	32.1	45.0		23.0	35.9	120.0
Actuated g/C Ratio	0.19	0.27	1.00	0.04	0.04	1.00	0.27	0.38		0.19	0.30	1.00
v/c Ratio	0.95	0.30	0.31	0.06	0.77	0.07	0.91	0.96		0.95	0.61	0.49
Control Delay (s/veh)	74.3	37.2	0.5	57.4	89.3	0.0	58.2	53.9		74.3	39.3	1.0
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 (s/veh)	74.3	37.2	0.5	57.4	89.3	0.0	58.2	53.9		74.3	39.3	1.0
LOS	E	D	A	E	F	A	E	D		E	D	A
Approach Delay (s/veh)		40.8			43.9			55.7			35.6	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	251	90	0	4	46	0	323	503		251	230	0
Queue Length 95th (ft)	#366	146	0	18	#97	0	#432	#656		#366	294	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	937	1583	73	147	1583	944	1327		657	1059	1583
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	0.30	0.32	0.07	0.78	0.08	0.89	0.96		0.96	0.61	0.49

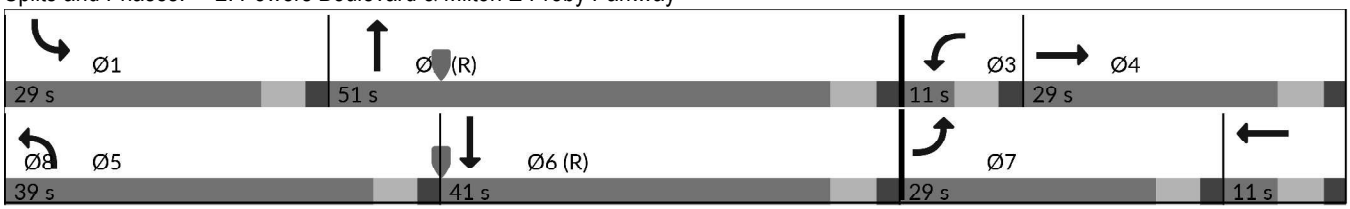
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 44.5	Intersection LOS: D
Intersection Capacity Utilization 87.1%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	23	80	205	1134	35	93	146	783	970	62	1786	47
Future Volume (vph)	23	80	205	1134	35	93	146	783	970	62	1786	47
Satd. Flow (prot)	3433	1863	1583	4990	3539	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	4990	3539	1583	1770	5085	1583	1770	5085	1583
Satd. Flow (RTOR)			245			245			945			245
Lane Group Flow (vph)	25	87	223	1233	38	101	159	851	1054	67	1941	51
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	12.0		36.0	37.0		17.0	56.0		16.0	55.0	
Total Split (%)	9.2%	10.0%		30.0%	30.8%		14.2%	46.7%		13.3%	45.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		Max	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	6.0	120.0	30.0	35.4	120.0	11.0	53.6	120.0	8.9	49.0	120.0
Actuated g/C Ratio	0.04	0.05	1.00	0.25	0.30	1.00	0.09	0.45	1.00	0.07	0.41	1.00
v/c Ratio	0.17	0.93	0.14	0.98	0.03	0.06	0.98	0.37	0.66	0.51	0.93	0.03
Control Delay (s/veh)	58.4	134.1	0.1	73.9	39.3	0.0	120.8	23.4	2.2	67.2	43.7	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	0.0
Total Delay (s/veh)	58.4	134.1	0.1	73.9	39.3	0.0	120.8	23.4	2.2	67.2	43.7	0.0
LOS	E	F	A	E	D	A	F	C	A	E	D	A
Approach Delay (s/veh)		39.3			67.5			20.1			43.4	
Approach LOS		D			E			C			D	
Queue Length 50th (ft)	9	68	0	290	8	0	125	166	0	50	519	0
Queue Length 95th (ft)	25	#173	0	m288	m8	m0	#266	203	0	99	#607	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	93	1583	1247	1044	1583	162	2269	1583	147	2076	1583
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	0.17	0.94	0.14	0.99	0.04	0.06	0.98	0.38	0.67	0.46	0.93	0.03

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 40.6	Intersection LOS: D
Intersection Capacity Utilization 85.8%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	916	179	59	1185	245	83	639	75	435	1455	2
Future Volume (vph)	1	916	179	59	1185	245	83	639	75	435	1455	2
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.093			0.116			0.135			0.131		
Satd. Flow (perm)	173	3539	1583	216	3539	1583	251	3539	1583	244	3539	1583
Satd. Flow (RTOR)			132			205			136			82
Lane Group Flow (vph)	1	996	195	64	1288	266	90	695	82	473	1582	2
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	49.0	49.0	49.0	49.0	49.0	49.0	11.0	33.0	33.0	38.0	60.0	60.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	40.8%	9.2%	27.5%	27.5%	31.7%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	43.0	43.0	43.0	43.0	43.0	43.0	34.1	29.6	29.6	65.0	54.5	54.5
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36	0.28	0.25	0.25	0.54	0.45	0.45
v/c Ratio	0.01	0.78	0.29	0.83	1.01	0.38	0.67	0.79	0.16	0.92	0.98	0.00
Control Delay (s/veh)	26.0	37.7	9.3	102.9	67.6	8.9	48.1	50.7	1.6	55.7	51.7	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	0.0
Total Delay (s/veh)	26.0	37.7	9.3	102.9	67.6	8.9	48.1	50.7	1.6	55.7	51.7	0.0
LOS	C	D	A	F	E	A	D	D	A	E	D	A
Approach Delay (s/veh)		33.1			59.4			45.9			52.6	
Approach LOS		C			E			D			D	
Queue Length 50th (ft)	1	373	40	45	~538	31	32	273	0	291	622	0
Queue Length 95th (ft)	m1	m451	m96	#134	#692	97	#101	#368	7	#482	#799	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	61	1268	651	77	1268	698	134	873	493	539	1607	763
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	0.02	0.79	0.30	0.83	1.02	0.38	0.67	0.80	0.17	0.88	0.98	0.00

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

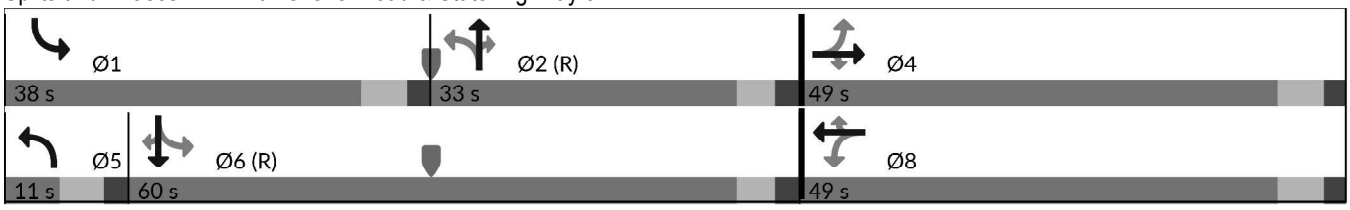
Intersection Signal Delay (s/veh): 49.5	Intersection LOS: D
Intersection Capacity Utilization 101.3%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1131	301	530	1412	127	60	32	282	346	188	28
Future Volume (vph)	14	1131	301	530	1412	127	60	32	282	346	188	28
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.167			0.075			0.396			0.734		
Satd. Flow (perm)	311	3539	1583	140	3539	1583	738	1863	1583	2652	1863	1583
Satd. Flow (RTOR)			150			138			307			136
Lane Group Flow (vph)	15	1229	327	576	1535	138	65	35	307	376	204	30
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	52.0	52.0	43.0	84.0	84.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	9.2%	43.3%	43.3%	35.8%	70.0%	70.0%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	52.2	47.1	47.1	89.3	84.9	84.9	18.7	18.7	18.7	18.7	18.7	18.7
Actuated g/C Ratio	0.44	0.39	0.39	0.74	0.71	0.71	0.16	0.16	0.16	0.16	0.16	0.16
v/c Ratio	0.07	0.88	0.45	0.96	0.61	0.11	0.57	0.12	0.60	0.91	0.70	0.08
Control Delay (s/veh)	11.5	43.1	16.6	60.7	10.4	1.4	67.2	44.6	10.5	76.6	61.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.5	43.1	16.6	60.7	10.4	1.4	67.2	44.6	10.5	76.6	61.9	0.4
LOS	B	D	B	E	B	A	E	D	B	E	E	A
Approach Delay (s/veh)		37.4			22.8			22.5			68.0	
Approach LOS		D			C			C			E	
Queue Length 50th (ft)	3	467	98	428	304	4	47	24	0	148	151	0
Queue Length 95th (ft)	10	#604	182	m#600	411	m10	#106	54	83	#237	#241	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	197	1390	713	606	2502	1159	116	294	509	419	294	365
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	0.08	0.88	0.46	0.95	0.61	0.12	0.56	0.12	0.60	0.90	0.69	0.08

Intersection Summary

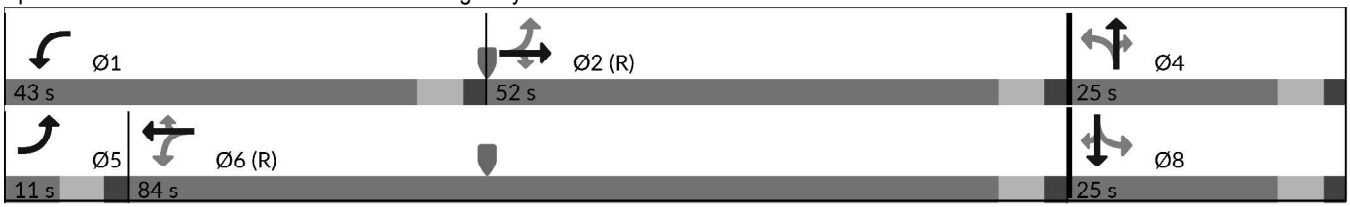
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 33.2	Intersection LOS: C
Intersection Capacity Utilization 94.7%	ICU Level of Service F
Analysis Period (min) 15	

\# 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	447	1319	60	879	0	1165	0	22	0	14	3
Future Volume (vph)	0	447	1319	60	879	0	1165	0	22	0	14	3
Satd. Flow (prot)	1863	3539	1583	1770	3539	0	3433	1863	1583	0	1863	1583
Flt Permitted				0.407			0.748					
Satd. Flow (perm)	1863	3539	1583	758	3539	0	2703	1863	1583	0	1863	1583
Satd. Flow (RTOR)			979						735			27
Lane Group Flow (vph)	0	486	1434	65	955	0	1266	0	24	0	15	3
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	48.0	48.0		48.0	48.0		72.0	72.0		72.0	72.0	72.0
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	60.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		44.9	120.0	44.9	44.9		63.1		120.0		63.1	63.1
Actuated g/C Ratio		0.37	1.00	0.37	0.37		0.53		1.00		0.53	0.53
v/c Ratio		0.36	0.90	0.22	0.72		0.89		0.01		0.01	0.00
Control Delay (s/veh)		38.7	24.7	31.4	41.9		34.3		0.0		12.5	0.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay (s/veh)		38.7	24.7	31.4	41.9		34.3		0.0		12.5	0.0
LOS		D	C	C	D		C		A		B	A
Approach Delay (s/veh)		28.3			41.3			33.7			10.4	
Approach LOS		C			D			C			B	
Queue Length 50th (ft)		203	730	38	390		417		0		5	0
Queue Length 95th (ft)		m238	#837	m48	457		520		0		15	0
Internal Link Dist (ft)		5250			516			1547			706	
Turn Bay Length (ft)			600	190			200		340			100
Base Capacity (vph)		1324	1583	283	1324		1486		1583		1024	882
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.37	0.91	0.23	0.72		0.85		0.02		0.01	0.00

Intersection Summary

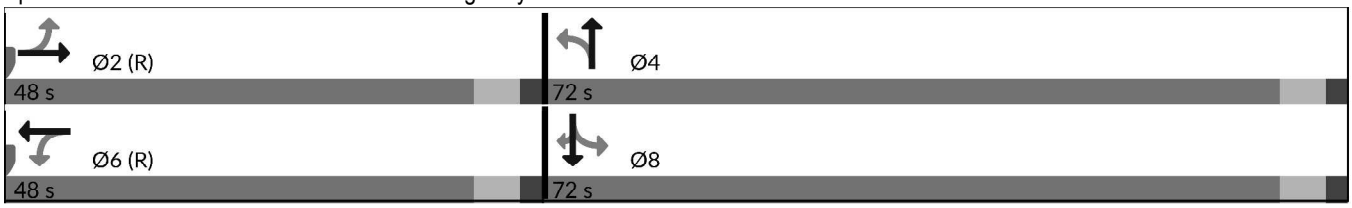
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 33.0	Intersection LOS: C
Intersection Capacity Utilization 83.4%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	415	48	41	779	5	107	71	105	22	34	53
Future Volume (vph)	3	415	48	41	779	5	107	71	105	22	34	53
Satd. Flow (prot)	0	1863	1583	1770	1861	0	1770	1863	1583	0	1722	0
Flt Permitted		0.995		0.297							0.770	
Satd. Flow (perm)	0	1853	1583	553	1861	0	1863	1863	1583	0	1340	0
Satd. Flow (RTOR)			273		1				273		58	
Lane Group Flow (vph)	0	454	52	45	852	0	116	77	114	0	119	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	27.0	27.0	11.0	27.0		11.0	11.0	11.0	11.0	11.0	
Total Split (%)	18.3%	45.0%	45.0%	18.3%	45.0%		18.3%	18.3%	18.3%	18.3%	18.3%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	Max	None	
Act Effct Green (s)		27.5	27.5	34.1	34.1		9.0	5.0	5.0		9.1	
Actuated g/C Ratio		0.46	0.46	0.57	0.57		0.15	0.08	0.08		0.15	
v/c Ratio		0.53	0.05	0.10	0.80		0.42	0.49	0.29		0.41	
Control Delay (s/veh)		22.8	0.5	9.1	25.4		23.5	38.5	1.9		14.9	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay (s/veh)		22.8	0.5	9.1	25.4		23.5	38.5	1.9		14.9	
LOS		C	A	A	C		C	D	A		B	
Approach Delay (s/veh)		20.6			24.7			19.3			15.0	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)		363	1	13	524		33	27	0		17	
Queue Length 95th (ft)		472	0	m22	#419		69	#72	0		51	
Internal Link Dist (ft)		4465			2487			442			1227	
Turn Bay Length (ft)			200	200			100		100			
Base Capacity (vph)		849	873	417	1058		271	155	382		284	
Starvation Cap Reductn		0	0	0	0		0	0	0		0	
Spillback Cap Reductn		0	0	0	0		0	0	0		0	
Storage Cap Reductn		0	0	0	0		0	0	0		0	
Reduced v/c Ratio		0.53	0.06	0.11	0.81		0.43	0.50	0.30		0.42	

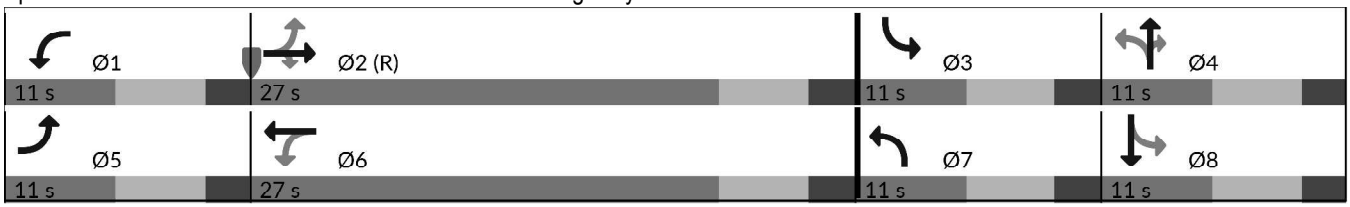
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 22.0	Intersection LOS: C
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	

\# 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.

Splits and Phases: 7: Access B/Slocum Road & State Highway 94



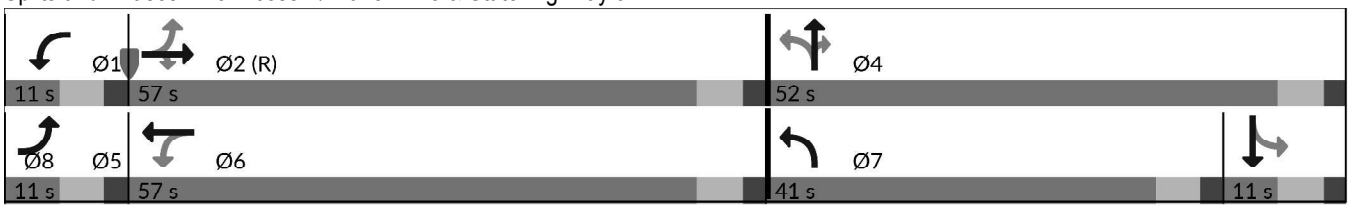
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	296	245	107	462	0	350	0	172	0	0	1
Future Volume (vph)	0	296	245	107	462	0	350	0	172	0	0	1
Satd. Flow (prot)	0	1863	1583	1770	1863	0	1770	1863	1583	0	1611	0
Flt Permitted				0.443			0.571					
Satd. Flow (perm)	0	1863	1583	825	1863	0	1064	1863	1583	0	1611	0
Satd. Flow (RTOR)			266						471		291	
Lane Group Flow (vph)	0	322	266	116	502	0	380	0	187	0	1	0
Turn Type		NA	Perm	pm+pt	NA		pm+pt		Perm		NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	57.0	57.0	11.0	57.0		41.0	52.0	52.0	11.0	11.0	
Total Split (%)	9.2%	47.5%	47.5%	9.2%	47.5%		34.2%	43.3%	43.3%	9.2%	9.2%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes			Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	None	None	
Act Effct Green (s)		62.0	62.0	75.4	75.4		32.6		32.6		5.3	
Actuated g/C Ratio		0.52	0.52	0.63	0.63		0.27		0.27		0.04	
v/c Ratio		0.33	0.28	0.20	0.42		0.81		0.24		0.00	
Control Delay (s/veh)		18.5	8.6	11.6	14.3		53.6		0.7		0.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay (s/veh)		18.5	8.6	11.6	14.3		53.6		0.7		0.0	
LOS		B	A	B	B		D		A		A	
Approach Delay (s/veh)		14.1			13.9			36.2				
Approach LOS		B			B			D				
Queue Length 50th (ft)		184	92	33	181		276		0		0	
Queue Length 95th (ft)		199	93	78	347		329		0		0	
Internal Link Dist (ft)		2487			3973			454			1253	
Turn Bay Length (ft)			200	200			100		100			
Base Capacity (vph)		962	946	576	1170		535		897		349	
Starvation Cap Reductn		0	0	0	0		0		0		0	
Spillback Cap Reductn		0	0	0	0		0		0		0	
Storage Cap Reductn		0	0	0	0		0		0		0	
Reduced v/c Ratio		0.33	0.28	0.20	0.43		0.71		0.21		0.00	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 21.1	Intersection LOS: C
Intersection Capacity Utilization 81.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: Acess A/Drake Drive & State Highway 94



Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	99	270	102	16	414	41	82	14	16	19	10	75
Future Vol, veh/h	99	270	102	16	414	41	82	14	16	19	10	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	108	293	111	17	450	45	89	15	17	21	11	82

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	404	0	0	1054	1093	349	1023	1127	472
Stage 1	-	-	-	-	-	-	564	564	-	507	507	-
Stage 2	-	-	-	-	-	-	490	529	-	516	620	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1069	-	-	1154	-	-	204	214	694	214	205	592
Stage 1	-	-	-	-	-	-	510	508	-	548	539	-
Stage 2	-	-	-	-	-	-	560	527	-	542	480	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1069	-	-	1154	-	-	147	190	694	171	181	592
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	190	-	171	181	-
Stage 1	-	-	-	-	-	-	459	457	-	540	531	-
Stage 2	-	-	-	-	-	-	466	519	-	459	432	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.84	0.28	49.64	19.79
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	147	310	1069	-	-	1154	-	-	355
HCM Lane V/C Ratio	0.605	0.105	0.101	-	-	0.015	-	-	0.318
HCM Control Delay (s/veh)	61.2	18	8.7	-	-	8.2	-	-	19.8
HCM Lane LOS	F	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.2	0.3	0.3	-	-	0	-	-	1.3

Intersection	
Int Delay, s/veh	19.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	705	482	0	296	1097
Future Vol, veh/h	0	705	482	0	296	1097
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	766	524	0	322	1192

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1764	262	0	0	524	0
Stage 1	524	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
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	111	~ 737	-	-	1039	-
Stage 1	559	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	77	~ 737	-	-	1039	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	67.63	0	2.13
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	737	1039	-
HCM Lane V/C Ratio	-	-	1.04	0.31	-
HCM Control Delay (s/veh)	-	-	67.6	10	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	18.9	1.3	-

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

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	355	482	0	223	874
Future Vol, veh/h	0	355	482	0	223	874
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	386	524	0	242	950

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1484	262	0	0	524	0
Stage 1	524	-	-	-	-	-
Stage 2	960	-	-	-	-	-
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	116	737	-	-	1039	-
Stage 1	559	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	89	737	-	-	1039	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	255	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.13	0	1.93
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	737	1039	-
HCM Lane V/C Ratio	-	-	0.524	0.233	-
HCM Control Delay (s/veh)	-	-	15.1	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	3.1	0.9	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	669	825	351	852	776	711
Future Volume (vph)	669	825	351	852	776	711
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.290	
Satd. Flow (perm)	3433	1583	3539	1583	540	3539
Satd. Flow (RTOR)		789		479		
Lane Group Flow (vph)	727	897	382	926	843	773
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	35.0		23.0		62.0	85.0
Total Split (%)	29.2%		19.2%		51.7%	70.8%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	28.0	120.0	21.6	120.0	80.0	80.0
Actuated g/C Ratio	0.23	1.00	0.18	1.00	0.67	0.67
v/c Ratio	0.90	0.56	0.60	0.58	0.93	0.32
Control Delay (s/veh)	60.8	1.4	51.4	1.5	39.5	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.8	1.4	51.4	1.5	39.5	9.1
LOS	E	A	D	A	D	A
Approach Delay (s/veh)	28.0		16.2			25.0
Approach LOS	C		B			C
Queue Length 50th (ft)	280	0	151	0	484	126
Queue Length 95th (ft)	#380	0	#207	0	#770	159
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	829	1583	636	1583	933	2358
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	0.88	0.57	0.60	0.58	0.90	0.33

Intersection Summary

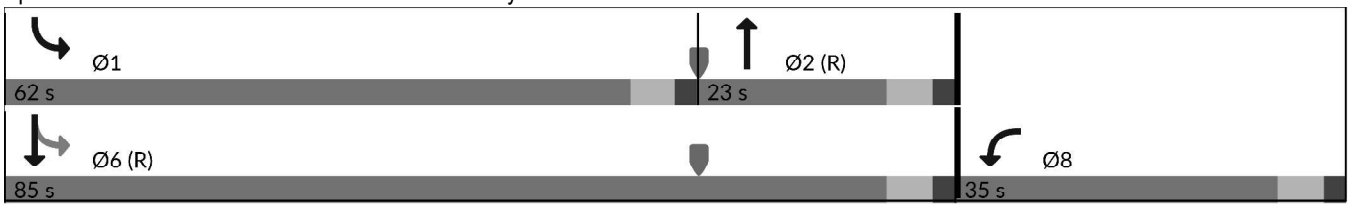
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 86.8%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	632	125	747	18	222	382	523	686	11	171	1090	566
Future Volume (vph)	632	125	747	18	222	382	523	686	11	171	1090	566
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			521			320			300			414
Lane Group Flow (vph)	687	136	812	20	241	415	568	746	12	186	1185	615
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	31.0	35.0		11.0	15.0		26.0	57.0		17.0	48.0	
Total Split (%)	25.8%	29.2%		9.2%	12.5%		21.7%	47.5%		14.2%	40.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	35.6	120.0	5.0	9.0	120.0	20.0	51.6	120.0	10.4	42.0	120.0
Actuated g/C Ratio	0.21	0.30	1.00	0.04	0.08	1.00	0.17	0.43	1.00	0.09	0.35	1.00
v/c Ratio	0.96	0.12	0.51	0.27	0.90	0.26	0.99	0.49	0.00	0.62	0.95	0.38
Control Delay (s/veh)	72.6	32.8	1.1	65.3	91.5	0.4	86.1	26.2	0.0	62.6	55.6	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 (s/veh)	72.6	32.8	1.1	65.3	91.5	0.4	86.1	26.2	0.0	62.6	55.6	0.7
LOS	E	C	A	E	F	A	F	C	A	E	E	A
Approach Delay (s/veh)		33.9			34.8			51.6			39.3	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	273	38	0	15	99	0	228	217	0	72	468	0
Queue Length 95th (ft)	#393	72	0	42	#178	0	#347	275	0	111	#616	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	715	1049	1583	73	265	1583	572	1521	1583	314	1238	1583
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	0.96	0.13	0.51	0.27	0.91	0.26	0.99	0.49	0.01	0.59	0.96	0.39

Intersection Summary

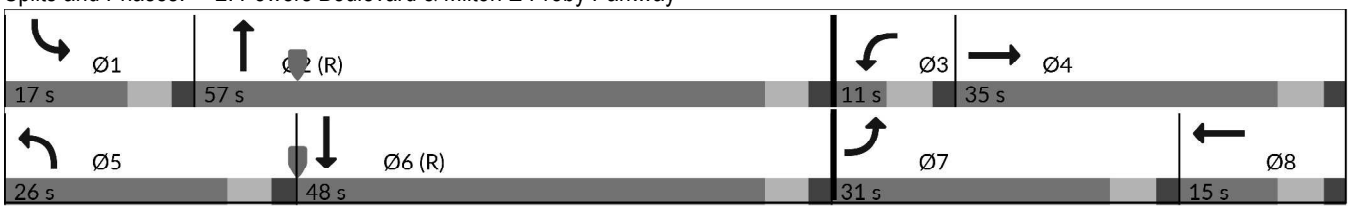
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay (s/veh): 40.1	Intersection LOS: D
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	47	187	900	51	74	202	1863	1153	100	1117	32
Future Volume (vph)	30	47	187	900	51	74	202	1863	1153	100	1117	32
Satd. Flow (prot)	3433	1863	1583	4990	3539	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	4990	3539	1583	1770	5085	1583	1770	5085	1583
Satd. Flow (RTOR)			300			300			932			300
Lane Group Flow (vph)	33	51	203	978	55	80	220	2025	1253	109	1214	35
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		33.0	33.0		30.0	60.0		16.0	46.0	
Total Split (%)	9.2%	9.2%		27.5%	27.5%		25.0%	50.0%		13.3%	38.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.2	120.0	26.5	28.7	120.0	19.5	57.0	120.0	9.7	47.2	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.22	0.24	1.00	0.16	0.48	1.00	0.08	0.39	1.00
v/c Ratio	0.23	0.63	0.12	0.88	0.06	0.05	0.76	0.83	0.79	0.76	0.60	0.02
Control Delay (s/veh)	59.7	90.4	0.1	75.1	65.1	0.0	65.2	32.3	4.1	86.3	32.0	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	0.0
Total Delay (s/veh)	59.7	90.4	0.1	75.1	65.1	0.0	65.2	32.3	4.1	86.3	32.0	0.0
LOS	E	F	A	E	E	A	E	C	A	F	C	A
Approach Delay (s/veh)		23.1			69.3			24.3			35.6	
Approach LOS		C			E			C			D	
Queue Length 50th (ft)	12	40	0	286	23	0	164	513	0	84	284	0
Queue Length 95th (ft)	30	#105	0	#337	m37	m0	243	586	0	#176	354	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	80	1583	1122	861	1583	354	2415	1583	147	2000	1583
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	0.23	0.64	0.13	0.87	0.06	0.05	0.62	0.84	0.79	0.74	0.61	0.02

Intersection Summary

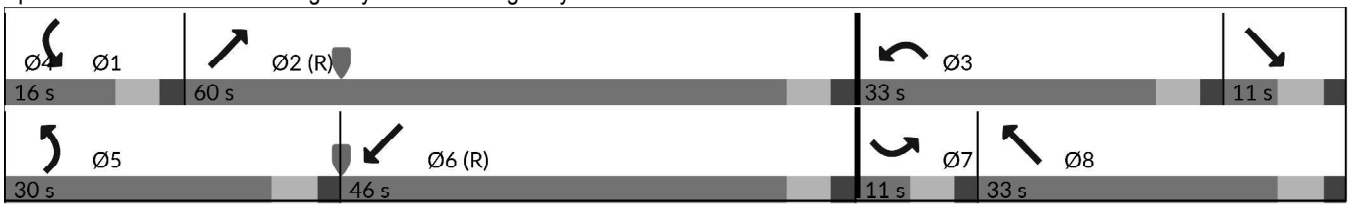
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 34.7	Intersection LOS: C
Intersection Capacity Utilization 80.3%	ICU Level of Service D
Analysis Period (min) 15	

\# 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1135	158	100	988	457	102	1164	32	242	681	14
Future Volume (vph)	2	1135	158	100	988	457	102	1164	32	242	681	14
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.155			0.105			0.215			0.103		
Satd. Flow (perm)	289	3539	1583	196	3539	1583	400	3539	1583	192	3539	1583
Satd. Flow (RTOR)			158			195			82			82
Lane Group Flow (vph)	2	1234	172	109	1074	497	111	1265	35	263	740	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	62.0	62.0	62.0	62.0	62.0	62.0	14.0	43.0	43.0	15.0	44.0	44.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	51.7%	51.7%	11.7%	35.8%	35.8%	12.5%	36.7%	36.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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	Max	C-Min	C-Min
Act Effct Green (s)	56.0	56.0	56.0	56.0	56.0	56.0	44.8	37.5	37.5	47.2	38.7	38.7
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47	0.37	0.31	0.31	0.39	0.32	0.32
v/c Ratio	0.01	0.74	0.20	1.19	0.65	0.59	0.46	1.14	0.06	1.36	0.64	0.02
Control Delay (s/veh)	20.5	31.3	5.5	189.3	26.8	16.8	27.6	114.2	0.2	218.1	38.0	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	0.0
Total Delay (s/veh)	20.5	31.3	5.5	189.3	26.8	16.8	27.6	114.2	0.2	218.1	38.0	0.0
LOS	C	C	A	F	C	B	C	F	A	F	D	A
Approach Delay (s/veh)		28.2			34.4			104.6			84.0	
Approach LOS		C			C			F			F	
Queue Length 50th (ft)	1	424	11	~102	326	166	51	~604	0	~219	258	0
Queue Length 95th (ft)	m1	511	m37	#221	400	276	89	#741	0	#391	326	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	134	1651	823	91	1651	842	241	1105	551	193	1141	566
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	0.01	0.75	0.21	1.20	0.65	0.59	0.46	1.14	0.06	1.36	0.65	0.03

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.36

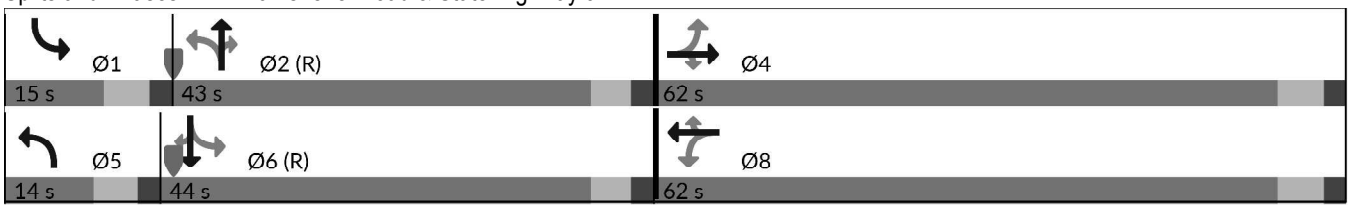
Intersection Signal Delay (s/veh): 59.9	Intersection LOS: E
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1295	39	374	1243	318	222	28	506	113	29	21
Future Volume (vph)	25	1295	39	374	1243	318	222	28	506	113	29	21
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.112			0.067			0.736			0.738		
Satd. Flow (perm)	209	3539	1583	242	3539	1583	1371	1863	1583	2667	1863	1583
Satd. Flow (RTOR)			82			346			107			82
Lane Group Flow (vph)	27	1408	42	407	1351	346	241	30	550	123	32	23
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	59.0	59.0	17.0	65.0	65.0	44.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	9.2%	49.2%	49.2%	14.2%	54.2%	54.2%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	58.6	53.5	53.5	70.8	64.2	64.2	37.2	37.2	37.2	37.2	37.2	37.2
Actuated g/C Ratio	0.49	0.45	0.45	0.59	0.54	0.54	0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.16	0.89	0.05	0.92	0.71	0.34	0.56	0.05	0.97	0.14	0.05	0.04
Control Delay (s/veh)	13.5	39.3	0.6	55.5	19.4	2.3	40.5	28.9	65.3	30.2	29.0	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	0.0
Total Delay (s/veh)	13.5	39.3	0.6	55.5	19.4	2.3	40.5	28.9	65.3	30.2	29.0	0.1
LOS	B	D	A	E	B	A	D	C	E	C	C	A
Approach Delay (s/veh)		37.8			23.6			56.7			26.1	
Approach LOS		D			C			E			C	
Queue Length 50th (ft)	8	521	0	110	389	18	154	16	351	35	17	0
Queue Length 95th (ft)	21	#636	3	m#158	m466	m25	241	39	#583	59	41	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	168	1578	750	441	1892	1007	434	589	574	844	589	557
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	0.16	0.89	0.06	0.92	0.71	0.34	0.56	0.05	0.96	0.15	0.05	0.04

Intersection Summary

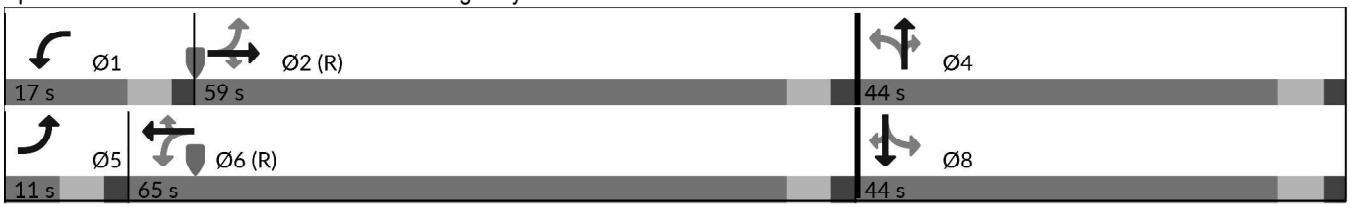
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 34.2	Intersection LOS: C
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	790	1117	25	526	0	1394	0	29	0	0	0
Future Volume (vph)	1	790	1117	25	526	0	1394	0	29	0	0	0
Satd. Flow (prot)	1770	3539	1583	1770	3539	0	3433	1863	1583	0	1863	1863
Flt Permitted	0.303			0.124			0.757					
Satd. Flow (perm)	564	3539	1583	231	3539	0	2736	1863	1583	0	1863	1863
Satd. Flow (RTOR)			1052						744			
Lane Group Flow (vph)	1	859	1214	27	572	0	1515	0	32	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	41.0	41.0		41.0	41.0		79.0	79.0		79.0	79.0	79.0
Total Split (%)	34.2%	34.2%		34.2%	34.2%		65.8%	65.8%		65.8%	65.8%	65.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	35.7	35.7	120.0	35.7	35.7		72.3		120.0			
Actuated g/C Ratio	0.30	0.30	1.00	0.30	0.30		0.60		1.00			
v/c Ratio	0.00	0.81	0.76	0.39	0.54		0.91		0.02			
Control Delay (s/veh)	31.0	43.7	9.8	59.5	41.2		31.6		0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)	31.0	43.7	9.8	59.5	41.2		31.6		0.0			
LOS	C	D	A	E	D		C		A			
Approach Delay (s/veh)		23.9			42.1			31.0				
Approach LOS		C			D			C				
Queue Length 50th (ft)	1	351	330	17	191		498		0			
Queue Length 95th (ft)	m1	m392	m466	m52	252		#653		0			
Internal Link Dist (ft)		5250			516			1536			706	
Turn Bay Length (ft)	115		600	190			200		340			
Base Capacity (vph)	167	1054	1583	68	1054		1664		1583			
Starvation Cap Reductn	0	0	0	0	0		0		0			
Spillback Cap Reductn	0	0	0	0	0		0		0			
Storage Cap Reductn	0	0	0	0	0		0		0			
Reduced v/c Ratio	0.01	0.81	0.77	0.40	0.54		0.91		0.02			

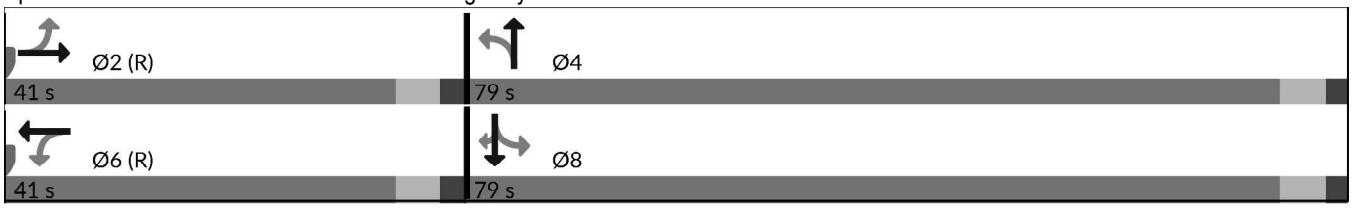
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 29.1	Intersection LOS: C
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

\# 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	691	98	102	462	9	74	51	69	33	68	15
Future Volume (vph)	39	691	98	102	462	9	74	51	69	33	68	15
Satd. Flow (prot)	0	3529	1583	1770	3529	0	1770	1863	1583	0	1805	0
Flt Permitted		0.900		0.226			0.458				0.884	
Satd. Flow (perm)	0	3185	1583	421	3529	0	853	1863	1583	0	1619	0
Satd. Flow (RTOR)			273		4				273		10	
Lane Group Flow (vph)	0	793	107	111	512	0	80	55	75	0	126	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	27.0	27.0	11.0	27.0		11.0	11.0	11.0	11.0	11.0	
Total Split (%)	18.3%	45.0%	45.0%	18.3%	45.0%		18.3%	18.3%	18.3%	18.3%	18.3%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	None	None	
Act Effct Green (s)		30.2	30.2	38.0	39.2		12.2	12.3	12.3		5.7	
Actuated g/C Ratio		0.50	0.50	0.63	0.65		0.20	0.21	0.21		0.10	
v/c Ratio		0.49	0.11	0.28	0.22		0.32	0.14	0.13		0.77	
Control Delay (s/veh)		14.7	0.8	9.8	8.3		21.4	18.3	0.5		60.5	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay (s/veh)		14.7	0.8	9.8	8.3		21.4	18.3	0.5		60.5	
LOS		B	A	A	A		C	B	A		E	
Approach Delay (s/veh)		13.1			8.6			13.2			60.5	
Approach LOS		B			A			B			E	
Queue Length 50th (ft)		334	0	34	97		22	15	0		42	
Queue Length 95th (ft)		403	m2	m65	141		51	38	0		#131	
Internal Link Dist (ft)		4455			2488			399			1227	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1602	932	386	2308		249	381	541		163	
Starvation Cap Reductn		0	0	0	0		0	0	0		0	
Spillback Cap Reductn		0	0	0	0		0	0	0		0	
Storage Cap Reductn		0	0	0	0		0	0	0		0	
Reduced v/c Ratio		0.50	0.11	0.29	0.22		0.32	0.14	0.14		0.77	

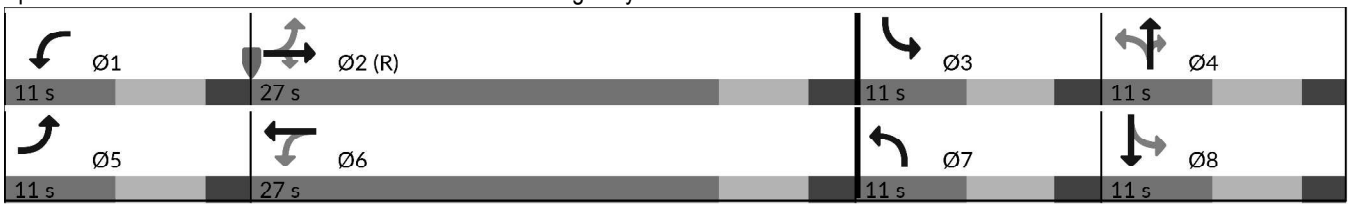
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay (s/veh): 14.8	Intersection LOS: B
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

\# 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.

Splits and Phases: 7: Access B/Slocum Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	489	303	163	326	0	257	0	133	0	0	0
Future Volume (vph)	1	489	303	163	326	0	257	0	133	0	0	0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	1770	1863	1583	0	1863	0
Flt Permitted		0.955		0.399			0.950					
Satd. Flow (perm)	0	3380	1583	743	3539	0	1770	1863	1583	0	1863	0
Satd. Flow (RTOR)			329						221			
Lane Group Flow (vph)	0	533	329	177	354	0	279	0	145	0	0	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt		Perm			
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	24.0	24.0	11.0	11.0		11.0	11.0	11.0	24.0	24.0	
Total Split (s)	11.0	45.0	45.0	20.0	54.0		31.0	55.0	55.0	24.0	24.0	
Total Split (%)	9.2%	37.5%	37.5%	16.7%	45.0%		25.8%	45.8%	45.8%	20.0%	20.0%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes			Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	None	None	
Act Effct Green (s)		69.9	69.9	85.4	85.4		22.6		22.6			
Actuated g/C Ratio		0.58	0.58	0.71	0.71		0.19		0.19			
v/c Ratio		0.27	0.31	0.29	0.14		0.84		0.30			
Control Delay (s/veh)		6.4	2.1	7.2	5.9		68.6		2.1			
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)		6.4	2.1	7.2	5.9		68.6		2.1			
LOS		A	A	A	A		E		A			
Approach Delay (s/veh)		4.8			6.4			45.9				
Approach LOS		A			A			D				
Queue Length 50th (ft)		13	0	42	44		205		0			
Queue Length 95th (ft)		148	m17	68	61		#325		4			
Internal Link Dist (ft)		2488			3982			377			1253	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1970	1059	648	2519		368		777			
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	0.31	0.27	0.14		0.76		0.19			

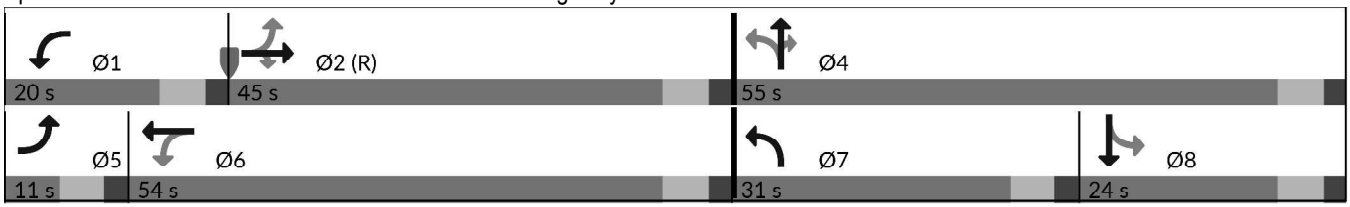
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay (s/veh): 14.9	Intersection LOS: B
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	

\# 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.

Splits and Phases: 8: Access A/Drake Drive & State Highway 94



Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	91	402	96	19	280	27	105	5	11	27	12	100
Future Vol, veh/h	91	402	96	19	280	27	105	5	11	27	12	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	99	437	104	21	304	29	114	5	12	29	13	109

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	334	0	0	541	0	0	887	1062	271	779	1099	167
Stage 1	-	-	-	-	-	-	687	687	-	360	360	-
Stage 2	-	-	-	-	-	-	200	375	-	419	739	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1222	-	-	1023	-	-	239	222	727	286	211	848
Stage 1	-	-	-	-	-	-	403	446	-	631	625	-
Stage 2	-	-	-	-	-	-	783	615	-	582	422	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1222	-	-	1023	-	-	176	200	727	247	190	848
Mov Cap-2 Maneuver	-	-	-	-	-	-	176	200	-	247	190	-
Stage 1	-	-	-	-	-	-	371	410	-	618	612	-
Stage 2	-	-	-	-	-	-	655	603	-	519	388	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.27	0.5	51.47	15.95
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	176	399	1222	-	-	1023	-	-	479
HCM Lane V/C Ratio	0.65	0.044	0.081	-	-	0.02	-	-	0.316
HCM Control Delay (s/veh)	57.1	14.4	8.2	-	-	8.6	-	-	16
HCM Lane LOS	F	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.7	0.1	0.3	-	-	0.1	-	-	1.3

Intersection	
Int Delay, s/veh	38.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	480	943	0	683	459
Future Vol, veh/h	0	480	943	0	683	459
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	522	1025	0	742	499

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2759	513	0	0	1025	0
Stage 1	1025	-	-	-	-	-
Stage 2	1734	-	-	-	-	-
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	15	~ 507	-	-	~ 673	-
Stage 1	307	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	0	~ 507	-	-	~ 673	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	76.6	0	53.83
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	~ 673	-
HCM Lane V/C Ratio	-	-	1.03	1.103	-
HCM Control Delay (s/veh)	-	-	76.6	90	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	15	21.6	-

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

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	297	943	0	364	95
Future Vol, veh/h	0	297	943	0	364	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	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	323	1025	0	396	103

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1868	513	0	0	1025	0
Stage 1	1025	-	-	-	-	-
Stage 2	843	-	-	-	-	-
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	64	507	-	-	673	-
Stage 1	307	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	507	-	-	673	-
Mov Cap-2 Maneuver	26	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	158	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.76	0	14.03
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	507	673	-
HCM Lane V/C Ratio	-	-	0.637	0.588	-
HCM Control Delay (s/veh)	-	-	23.8	17.7	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	4.4	3.9	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	783	1215	905	731	894	374
Future Volume (vph)	783	1215	905	731	894	374
Satd. Flow (prot)	3433	1583	3539	1583	3433	3539
Flt Permitted	0.950				0.088	
Satd. Flow (perm)	3433	1583	3539	1583	318	3539
Satd. Flow (RTOR)		681		628		
Lane Group Flow (vph)	851	1321	984	795	972	407
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	38.0		45.0		37.0	82.0
Total Split (%)	31.7%		37.5%		30.8%	68.3%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	31.5	120.0	39.5	120.0	76.5	76.5
Actuated g/C Ratio	0.26	1.00	0.33	1.00	0.64	0.64
v/c Ratio	0.94	0.83	0.84	0.50	0.96	0.18
Control Delay (s/veh)	62.9	5.3	45.4	1.1	55.4	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.9	5.3	45.4	1.1	55.4	9.2
LOS	E	A	D	A	E	A
Approach Delay (s/veh)	27.9		25.7			41.8
Approach LOS	C		C			D
Queue Length 50th (ft)	331	0	373	0	331	63
Queue Length 95th (ft)	#453	0	461	0	#469	86
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	915	1583	1166	1583	1007	2256
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	0.93	0.83	0.84	0.50	0.97	0.18

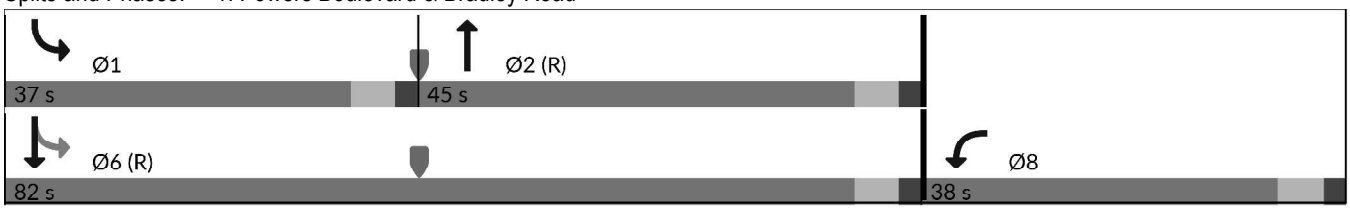
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 30.8	Intersection LOS: C
Intersection Capacity Utilization 87.9%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	779	352	567	6	141	149	947	1579	0	779	802	967
Future Volume (vph)	779	352	567	6	141	149	947	1579	0	779	802	967
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1863	3433	3539	1583
Satd. Flow (RTOR)			616			300						628
Lane Group Flow (vph)	847	383	616	7	153	162	1029	1716	0	847	872	1051
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	29.0	29.0		11.0	11.0		43.0	51.0		29.0	37.0	
Total Split (%)	24.2%	24.2%		9.2%	9.2%		35.8%	42.5%		24.2%	30.8%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	31.8	120.0	5.0	5.0	120.0	37.0	45.0		23.0	31.0	120.0
Actuated g/C Ratio	0.19	0.27	1.00	0.04	0.04	1.00	0.31	0.38		0.19	0.26	1.00
v/c Ratio	1.28	0.40	0.38	0.04	1.04	0.10	0.97	1.29		1.28	0.95	0.66
Control Delay (s/veh)	180.9	38.8	0.7	56.0	140.9	0.1	63.1	170.5		180.9	64.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	180.9	38.8	0.7	56.0	140.9	0.1	63.1	170.5		180.9	64.6	2.2
LOS	F	D	A	E	F	A	E	F		F	E	A
Approach Delay (s/veh)		91.3			68.2			130.3			76.5	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~430	125	0	2	~67	0	405	~892		~430	351	0
Queue Length 95th (ft)	#555	194	0	10	#139	0	#545	#1032		#555	#481	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445			250		325
Base Capacity (vph)	657	937	1583	143	147	1583	1058	1327		657	914	1583
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	1.29	0.41	0.39	0.05	1.04	0.10	0.97	1.29		1.29	0.95	0.66

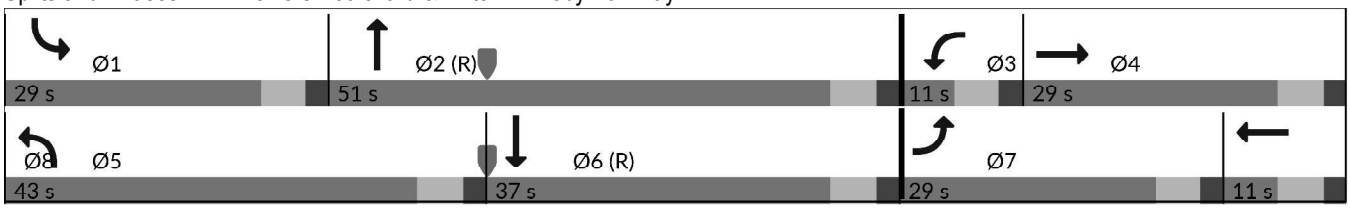
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay (s/veh): 98.9	Intersection LOS: F
Intersection Capacity Utilization 112.3%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	108	275	1271	47	94	197	1054	1167	67	2404	64
Future Volume (vph)	30	108	275	1271	47	94	197	1054	1167	67	2404	64
Satd. Flow (prot)	3433	1863	1583	4990	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	4990	3539	1583	3433	5085	1583	1770	5085	1583
Satd. Flow (RTOR)			245			245			985			245
Lane Group Flow (vph)	33	117	299	1382	51	102	214	1146	1268	73	2613	70
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		34.0	34.0		11.0	59.0		16.0	64.0	
Total Split (%)	9.2%	9.2%		28.3%	28.3%		9.2%	49.2%		13.3%	53.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	28.0	32.4	120.0	5.0	56.5	120.0	9.0	58.0	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.23	0.27	1.00	0.04	0.47	1.00	0.08	0.48	1.00
v/c Ratio	0.23	1.51	0.18	1.18	0.05	0.06	1.49	0.47	0.80	0.55	1.06	0.04
Control Delay (s/veh)	59.7	327.5	0.2	144.5	48.1	0.0	295.4	23.3	4.3	69.3	68.6	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	0.0
Total Delay (s/veh)	59.7	327.5	0.2	144.5	48.1	0.0	295.4	23.3	4.3	69.3	68.6	0.0
LOS	E	F	A	F	D	A	F	C	A	E	E	A
Approach Delay (s/veh)		89.9			131.8			36.3			66.9	
Approach LOS		F			F			D			E	
Queue Length 50th (ft)	12	~126	0	~442	14	0	~118	229	0	55	~817	0
Queue Length 95th (ft)	30	#249	0	m#493	m15	m0	#198	272	0	106	#908	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	1164	955	1583	143	2393	1583	147	2457	1583
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	0.23	1.52	0.19	1.19	0.05	0.06	1.50	0.48	0.80	0.50	1.06	0.04

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.52

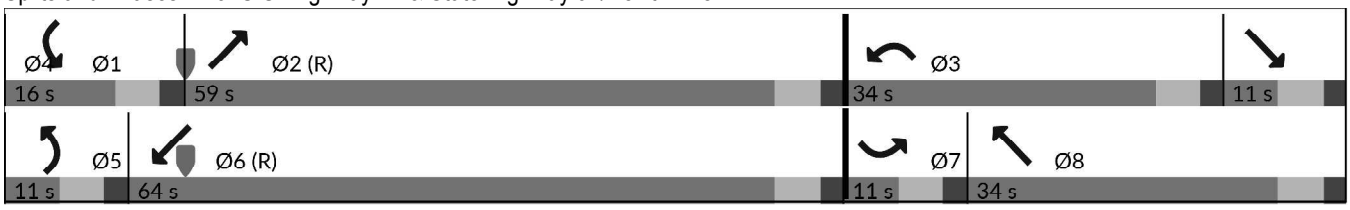
Intersection Signal Delay (s/veh): 70.9	Intersection LOS: E
Intersection Capacity Utilization 97.9%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1079	241	79	1307	298	112	859	102	568	1958	3
Future Volume (vph)	2	1079	241	79	1307	298	112	859	102	568	1958	3
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3433	5085	1583
Flt Permitted	0.078			0.099			0.121			0.137		
Satd. Flow (perm)	145	3539	1583	184	3539	1583	225	5085	1583	495	5085	1583
Satd. Flow (RTOR)			132			253			136			82
Lane Group Flow (vph)	2	1173	262	86	1421	324	122	934	111	617	2128	3
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	57.0	57.0	57.0	57.0	57.0	57.0	11.0	38.0	38.0	25.0	52.0	52.0
Total Split (%)	47.5%	47.5%	47.5%	47.5%	47.5%	47.5%	9.2%	31.7%	31.7%	20.8%	43.3%	43.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
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-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	51.0	51.0	51.0	51.0	51.0	51.0	37.6	33.1	33.1	57.0	46.5	46.5
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.31	0.28	0.28	0.48	0.39	0.39
v/c Ratio	0.03	0.77	0.35	1.10	0.94	0.39	0.91	0.66	0.20	0.90	1.08	0.00
Control Delay (s/veh)	23.0	32.9	11.8	168.8	46.9	7.0	83.4	41.4	4.0	44.2	81.4	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	0.0
Total Delay (s/veh)	23.0	32.9	11.8	168.8	46.9	7.0	83.4	41.4	4.0	44.2	81.4	0.0
LOS	C	C	B	F	D	A	F	D	A	D	F	A
Approach Delay (s/veh)		29.1			45.6			42.3			73.0	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	1	424	76	~76	546	33	52	237	0	173	~674	0
Queue Length 95th (ft)	m1	m486	m111	#184	#706	97	#162	287	29	#271	#770	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	61	1504	748	78	1504	818	134	1402	534	700	1970	663
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	0.03	0.78	0.35	1.10	0.94	0.40	0.91	0.67	0.21	0.88	1.08	0.00

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

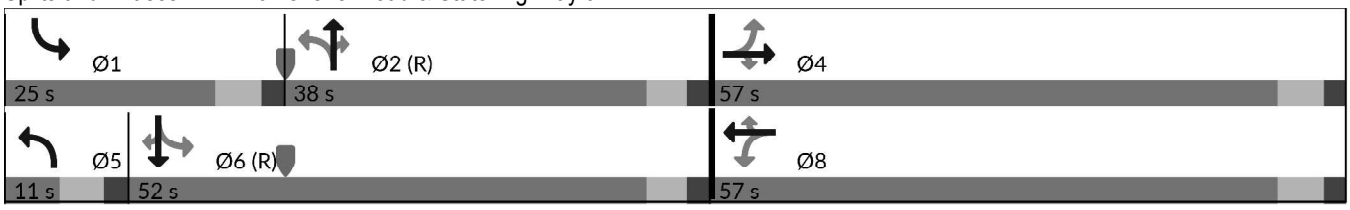
Intersection Signal Delay (s/veh): 52.2	Intersection LOS: D
Intersection Capacity Utilization 103.9%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1350	406	553	1579	139	80	42	293	449	253	38
Future Volume (vph)	18	1350	406	553	1579	139	80	42	293	449	253	38
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.127			0.074			0.257			0.727		
Satd. Flow (perm)	237	3539	1583	138	3539	1583	479	1863	1583	2627	1863	1583
Satd. Flow (RTOR)			136			151			318			136
Lane Group Flow (vph)	20	1467	441	601	1716	151	87	46	318	488	275	41
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	54.0	54.0	39.0	82.0	82.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (%)	9.2%	45.0%	45.0%	32.5%	68.3%	68.3%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	53.0	48.0	48.0	87.0	82.6	82.6	21.0	21.0	21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.44	0.40	0.40	0.73	0.69	0.69	0.18	0.18	0.18	0.18	0.18	0.18
v/c Ratio	0.11	1.03	0.61	1.09	0.70	0.13	1.04	0.14	0.58	1.06	0.84	0.10
Control Delay (s/veh)	11.8	69.6	23.6	92.1	13.2	1.4	161.4	43.3	9.6	107.0	71.1	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 (s/veh)	11.8	69.6	23.6	92.1	13.2	1.4	161.4	43.3	9.6	107.0	71.1	0.5
LOS	B	E	C	F	B	A	F	D	A	F	E	A
Approach Delay (s/veh)		58.5			31.8			42.3			89.4	
Approach LOS		E			C			D			F	
Queue Length 50th (ft)	4	~644	186	~493	393	4	~73	31	0	~214	208	0
Queue Length 95th (ft)	11	#783	299	m#630	m536	m9	#181	65	82	#322	#353	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	168	1415	714	548	2435	1136	83	326	539	459	326	389
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	0.12	1.04	0.62	1.10	0.70	0.13	1.05	0.14	0.59	1.06	0.84	0.11

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

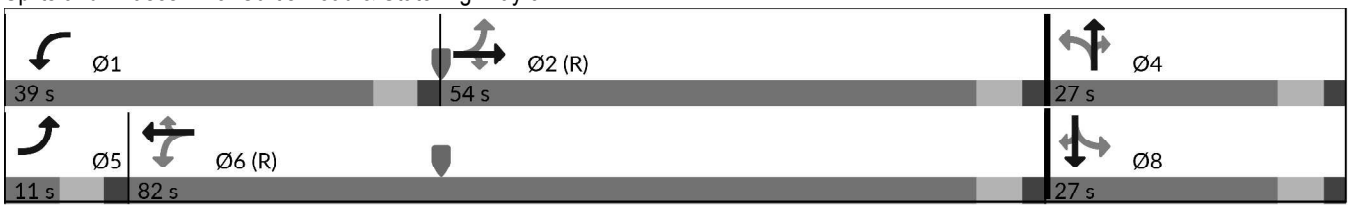
Intersection Signal Delay (s/veh): 49.9	Intersection LOS: D
Intersection Capacity Utilization 105.7%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	505	1597	80	1038	0	1201	0	30	0	18	5
Future Volume (vph)	0	505	1597	80	1038	0	1201	0	30	0	18	5
Satd. Flow (prot)	1863	3539	1583	1770	3539	0	3433	1863	1583	0	1863	1583
Flt Permitted				0.368			0.744					
Satd. Flow (perm)	1863	3539	1583	685	3539	0	2689	1863	1583	0	1863	1583
Satd. Flow (RTOR)			944						703			27
Lane Group Flow (vph)	0	549	1736	87	1128	0	1305	0	33	0	20	5
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free		NA	Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	51.0	51.0		51.0	51.0		69.0	69.0		69.0	69.0	69.0
Total Split (%)	42.5%	42.5%		42.5%	42.5%		57.5%	57.5%		57.5%	57.5%	57.5%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)		46.2	120.0	46.2	46.2		61.8		120.0		61.8	61.8
Actuated g/C Ratio		0.39	1.00	0.39	0.39		0.52		1.00		0.52	0.52
v/c Ratio		0.40	1.09	0.33	0.82		0.94		0.02		0.02	0.00
Control Delay (s/veh)		37.7	70.3	36.5	47.7		41.7		0.0		13.8	0.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay (s/veh)		37.7	70.3	36.5	47.7		41.7		0.0		13.8	0.0
LOS		D	E	D	D		D		A		B	A
Approach Delay (s/veh)		62.5			46.9			40.7			11.1	
Approach LOS		E			D			D			B	
Queue Length 50th (ft)		231	~1042	61	484		462		0		7	0
Queue Length 95th (ft)		m234	m#982	m78	554		#632		0		20	0
Internal Link Dist (ft)		5250			516			1536			706	
Turn Bay Length (ft)			600	190			200		340			100
Base Capacity (vph)		1362	1583	263	1362		1411		1583		978	843
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.40	1.10	0.33	0.83		0.92		0.02		0.02	0.01

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

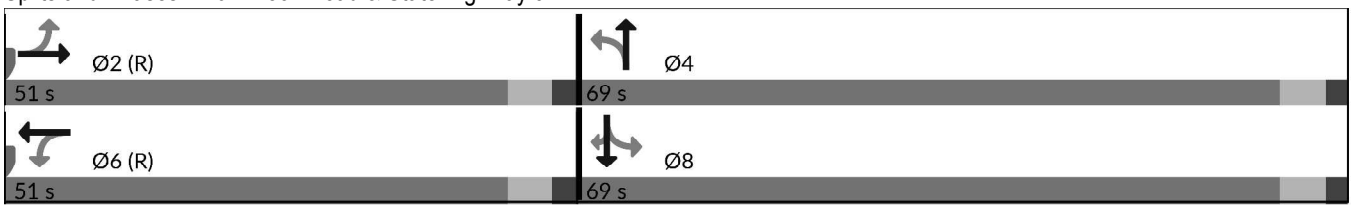
Intersection Signal Delay (s/veh): 52.4	Intersection LOS: D
Intersection Capacity Utilization 88.8%	ICU Level of Service E
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	478	48	41	942	6	107	71	105	24	0	105
Future Volume (vph)	5	478	48	41	942	6	107	71	105	24	0	105
Satd. Flow (prot)	0	1863	1583	1770	1861	0	1770	1863	1583	0	1643	0
Flt Permitted		0.991		0.338			0.800				0.977	
Satd. Flow (perm)	0	1846	1583	630	1861	0	1490	1863	1583	0	1620	0
Satd. Flow (RTOR)			191						191		114	
Lane Group Flow (vph)	0	525	52	45	1031	0	116	77	114	0	140	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	24.0	11.0	
Total Split (s)	11.0	74.0	74.0	11.0	74.0		17.0	11.0	11.0	24.0	18.0	
Total Split (%)	9.2%	61.7%	61.7%	9.2%	61.7%		14.2%	9.2%	9.2%	20.0%	15.0%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	Max	None	
Act Effct Green (s)		70.2	70.2	79.0	79.0		15.1	5.0	5.0		30.0	
Actuated g/C Ratio		0.59	0.59	0.66	0.66		0.13	0.04	0.04		0.25	
v/c Ratio		0.48	0.05	0.09	0.84		0.54	1.00	0.45		0.28	
Control Delay (s/veh)		35.1	1.6	5.8	22.6		48.2	160.4	5.9		11.3	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay (s/veh)		35.1	1.6	5.8	22.6		48.2	160.4	5.9		11.3	
LOS		D	A	A	C		D	F	A		B	
Approach Delay (s/veh)		32.1			22.0			60.7			11.4	
Approach LOS		C			C			E			B	
Queue Length 50th (ft)		249	0	11	728		73	61	0		15	
Queue Length 95th (ft)		359	9	m14	611		127	#163	0		67	
Internal Link Dist (ft)		4455			2488			517			1227	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1080	1005	462	1225		224	77	249		494	
Starvation Cap Reductn		0	0	0	0		0	0	0		0	
Spillback Cap Reductn		0	0	0	0		0	0	0		0	
Storage Cap Reductn		0	0	0	0		0	0	0		0	
Reduced v/c Ratio		0.49	0.05	0.10	0.84		0.52	1.00	0.46		0.28	

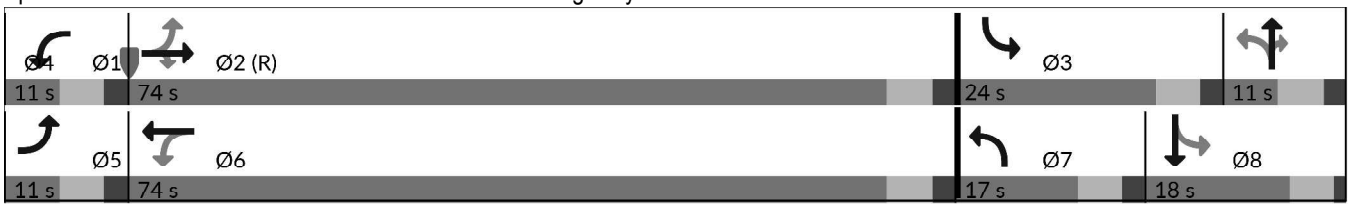
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay (s/veh): 29.7	Intersection LOS: C
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

\# 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.

Splits and Phases: 7: Access B/Slocum Road & State Highway 94



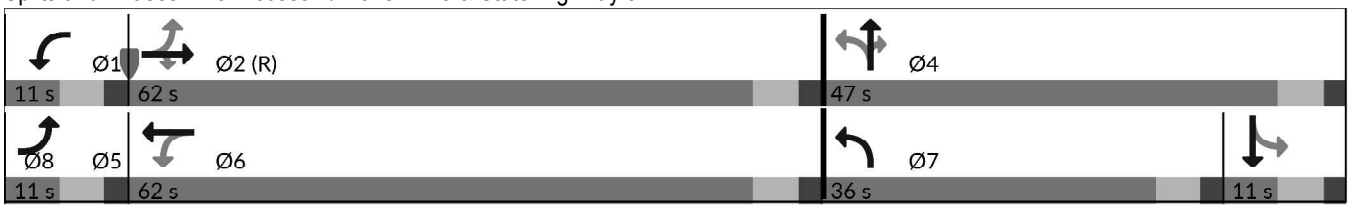
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	362	245	107	607	0	350	0	105	0	0	2
Future Volume (vph)	0	362	245	107	607	0	350	0	105	0	0	2
Satd. Flow (prot)	0	1863	1583	1770	1863	0	1770	1863	1583	0	1611	0
Flt Permitted				0.394			0.571					
Satd. Flow (perm)	0	1863	1583	734	1863	0	1064	1863	1583	0	1611	0
Satd. Flow (RTOR)			266						426		235	
Lane Group Flow (vph)	0	393	266	116	660	0	380	0	114	0	2	0
Turn Type		NA	Perm	pm+pt	NA		pm+pt		Perm		NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	62.0	62.0	11.0	62.0		36.0	47.0	47.0	11.0	11.0	
Total Split (%)	9.2%	51.7%	51.7%	9.2%	51.7%		30.0%	39.2%	39.2%	9.2%	9.2%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes			Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	None	None	
Act Effct Green (s)		64.5	64.5	77.8	77.8		30.2		30.2		5.2	
Actuated g/C Ratio		0.54	0.54	0.65	0.65		0.25		0.25		0.04	
v/c Ratio		0.39	0.27	0.21	0.54		0.87		0.15		0.00	
Control Delay (s/veh)		15.8	5.8	10.2	14.8		63.7		0.4		0.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay (s/veh)		15.8	5.8	10.2	14.8		63.7		0.4		0.0	
LOS		B	A	B	B		E		A		A	
Approach Delay (s/veh)		11.8			14.2			49.1				
Approach LOS		B			B			D				
Queue Length 50th (ft)		147	44	31	256		283		0		0	
Queue Length 95th (ft)		175	54	70	460		354		0		0	
Internal Link Dist (ft)		2488			3982			341			1253	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1001	973	538	1207		462		821		294	
Starvation Cap Reductn		0	0	0	0		0		0		0	
Spillback Cap Reductn		0	0	0	0		0		0		0	
Storage Cap Reductn		0	0	0	0		0		0		0	
Reduced v/c Ratio		0.39	0.27	0.22	0.55		0.82		0.14		0.01	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 22.3	Intersection LOS: C
Intersection Capacity Utilization 92.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: Access A/Drake Drive & State Highway 94



Intersection	
Int Delay, s/veh	15.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	101	331	106	21	540	55	92	18	21	26	14	83
Future Vol, veh/h	101	331	106	21	540	55	92	18	21	26	14	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	360	115	23	587	60	100	20	23	28	15	90

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	647	0	0	475	0	0	1220	1272	360	1252	1357	617
Stage 1	-	-	-	-	-	-	579	579	-	663	663	-
Stage 2	-	-	-	-	-	-	640	692	-	589	695	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	939	-	-	1087	-	-	157	168	685	149	149	490
Stage 1	-	-	-	-	-	-	501	500	-	451	459	-
Stage 2	-	-	-	-	-	-	464	445	-	494	444	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	939	-	-	1087	-	-	~ 99	145	685	110	129	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 99	145	-	110	129	-
Stage 1	-	-	-	-	-	-	442	442	-	441	449	-
Stage 2	-	-	-	-	-	-	358	436	-	403	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.75	0.29	126.9	37.65
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	99	252	939	-	-	1087	-	-	239
HCM Lane V/C Ratio	1.008	0.168	0.117	-	-	0.021	-	-	0.56
HCM Control Delay (s/veh)	171.3	22.2	9.3	-	-	8.4	-	-	37.6
HCM Lane LOS	F	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	6.2	0.6	0.4	-	-	0.1	-	-	3.1

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

Intersection	
Int Delay, s/veh	20.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	705	526	0	296	1399
Future Vol, veh/h	0	705	526	0	296	1399
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	766	572	0	322	1521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1976	286	0	0	572	0
Stage 1	572	-	-	-	-	-
Stage 2	1404	-	-	-	-	-
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	83	~ 711	-	-	997	-
Stage 1	528	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	56	~ 711	-	-	997	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	242	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	80.16	0	1.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	711	997	-
HCM Lane V/C Ratio	-	-	1.078	0.323	-
HCM Control Delay (s/veh)	-	-	80.2	10.3	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	20.8	1.4	-

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

Intersection	
Int Delay, s/veh	378.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	355	0	526	0	223	1176
Future Vol, veh/h	355	0	526	0	223	1176
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	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	386	0	572	0	242	1278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1696	286	0	0	572	0
Stage 1	572	-	-	-	-	-
Stage 2	1124	-	-	-	-	-
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	~ 84	711	-	-	997	-
Stage 1	528	-	-	-	-	-
Stage 2	~ 272	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 63	711	-	-	997	-
Mov Cap-2 Maneuver	~ 63	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	~ 206	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/veh	$ 2423.91	0	1.56
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	63	997	-
HCM Lane V/C Ratio	-	-	6.102	0.243	-
HCM Control Delay (s/veh)	-	-	$ 2423.9	9.8	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	43.6	1	-

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

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	813	982	473	1056	910	956
Future Volume (vph)	813	982	473	1056	910	956
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.167	
Satd. Flow (perm)	3433	1583	3539	1583	311	3539
Satd. Flow (RTOR)		772		467		
Lane Group Flow (vph)	884	1067	514	1148	989	1039
Turn Type	Prot	Free	NA	Free	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		Free		Free	6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	5.0		5.0		5.0	5.0
Minimum Split (s)	11.0		11.0		11.0	11.0
Total Split (s)	34.0		24.0		62.0	86.0
Total Split (%)	28.3%		20.0%		51.7%	71.7%
Yellow Time (s)	4.0		4.0		4.0	4.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		6.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	28.0	120.0	18.0	120.0	80.0	80.0
Actuated g/C Ratio	0.23	1.00	0.15	1.00	0.67	0.67
v/c Ratio	1.10	0.67	0.96	0.72	1.11	0.44
Control Delay (s/veh)	106.9	2.3	83.2	2.9	93.3	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	106.9	2.3	83.2	2.9	93.3	10.1
LOS	F	A	F	A	F	B
Approach Delay (s/veh)	49.7		27.8			50.7
Approach LOS	D		C			D
Queue Length 50th (ft)	~401	0	211	0	~829	182
Queue Length 95th (ft)	#528	0	#322	0	#1085	224
Internal Link Dist (ft)	837		1096			877
Turn Bay Length (ft)	620	620		635	670	
Base Capacity (vph)	801	1583	530	1583	888	2359
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	1.10	0.67	0.97	0.73	1.11	0.44

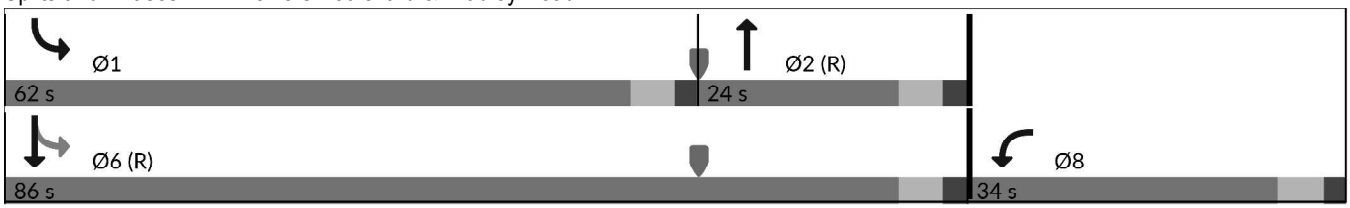
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay (s/veh): 43.6	Intersection LOS: D
Intersection Capacity Utilization 101.7%	ICU Level of Service G
Analysis Period (min) 15	

~ 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.

Splits and Phases: 1: Powers Boulevard & Bradley Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	850	168	913	24	299	514	633	923	15	230	1467	762
Future Volume (vph)	850	168	913	24	299	514	633	923	15	230	1467	762
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			499			311			245			414
Lane Group Flow (vph)	924	183	992	26	325	559	688	1003	16	250	1595	828
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	31.0	35.0		11.0	15.0		24.0	54.0		20.0	50.0	
Total Split (%)	25.8%	29.2%		9.2%	12.5%		20.0%	45.0%		16.7%	41.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	25.0	33.4	120.0	5.0	9.0	120.0	18.0	49.1	120.0	12.9	44.0	120.0
Actuated g/C Ratio	0.21	0.28	1.00	0.04	0.08	1.00	0.15	0.41	1.00	0.11	0.37	1.00
v/c Ratio	1.29	0.18	0.62	0.18	1.22	0.35	1.33	0.69	0.01	0.67	1.22	0.52
Control Delay (s/veh)	180.7	34.9	1.8	58.5	176.5	0.6	204.8	32.5	0.0	61.1	144.5	1.2
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 (s/veh)	180.7	34.9	1.8	58.5	176.5	0.6	204.8	32.5	0.0	61.1	144.5	1.2
LOS	F	C	A	E	F	A	F	C	A	E	F	A
Approach Delay (s/veh)		83.5			65.1			101.7			92.4	
Approach LOS		F			E			F			F	
Queue Length 50th (ft)	~470	60	0	10	~163	0	~357	337	0	96	~802	0
Queue Length 95th (ft)	#598	92	0	25	#258	0	#477	415	0	140	#942	0
Internal Link Dist (ft)		855			745			788			563	
Turn Bay Length (ft)	645		350	590		390	445		265	250		325
Base Capacity (vph)	715	985	1583	143	265	1583	514	1447	1583	400	1297	1583
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	1.29	0.19	0.63	0.18	1.23	0.35	1.34	0.69	0.01	0.63	1.23	0.52

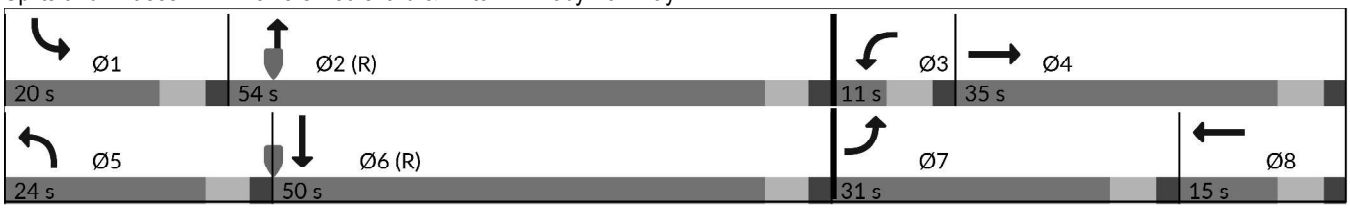
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.34

Intersection Signal Delay (s/veh): 88.7	Intersection LOS: F
Intersection Capacity Utilization 111.1%	ICU Level of Service H
Analysis Period (min) 15	

~ 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.

Splits and Phases: 2: Powers Boulevard & Milton E Proby Parkway



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	41	64	252	1022	68	77	271	2507	1306	104	1504	42
Future Volume (vph)	41	64	252	1022	68	77	271	2507	1306	104	1504	42
Satd. Flow (prot)	3433	1863	1583	4990	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	4990	3539	1583	3433	5085	1583	1770	5085	1583
Satd. Flow (RTOR)			300			300			949			300
Lane Group Flow (vph)	45	70	274	1111	74	84	295	2725	1420	113	1635	46
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free			Free
Detector Phase	7	4		3	8		5	2		1	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)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	11.0	11.0		31.0	31.0		22.0	65.0		13.0	56.0	
Total Split (%)	9.2%	9.2%		25.8%	25.8%		18.3%	54.2%		10.8%	46.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	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	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	5.0	120.0	25.0	27.2	120.0	14.5	59.0	120.0	7.0	51.5	120.0
Actuated g/C Ratio	0.04	0.04	1.00	0.21	0.23	1.00	0.12	0.49	1.00	0.06	0.43	1.00
v/c Ratio	0.31	0.90	0.17	1.06	0.09	0.05	0.71	1.09	0.89	1.09	0.75	0.02
Control Delay (s/veh)	61.8	137.1	0.2	108.3	52.5	0.0	60.4	78.1	9.2	169.2	31.7	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	0.0
Total Delay (s/veh)	61.8	137.1	0.2	108.3	52.5	0.0	60.4	78.1	9.2	169.2	31.7	0.0
LOS	E	F	A	F	D	A	E	E	A	F	C	A
Approach Delay (s/veh)		32.0			97.9			54.9			39.6	
Approach LOS		C			F			D			D	
Queue Length 50th (ft)	18	55	0	~322	20	0	113	~870	0	~99	389	0
Queue Length 95th (ft)	38	#149	0	#443	m35	m0	161	#960	#2	#220	453	0
Internal Link Dist (ft)		400			1212			1110			1186	
Turn Bay Length (ft)	230		275	475		505	925		670	780		790
Base Capacity (vph)	143	77	1583	1039	802	1583	457	2500	1583	103	2180	1583
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	0.31	0.91	0.17	1.07	0.09	0.05	0.65	1.09	0.90	1.10	0.75	0.03

Intersection Summary

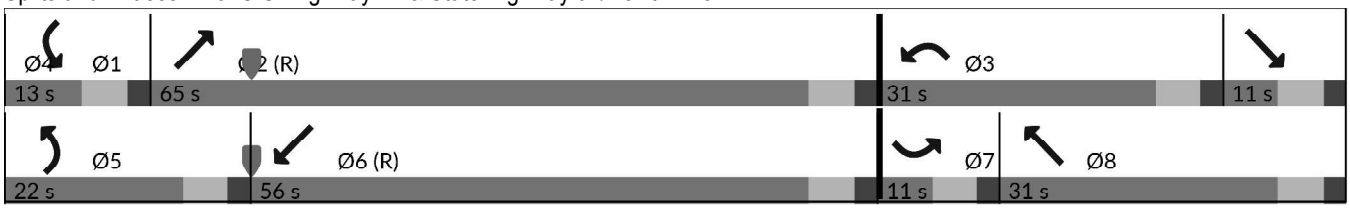
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green, Master Intersection
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay (s/veh): 57.2	Intersection LOS: E
Intersection Capacity Utilization 95.3%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 3: U.S. Highway 24 & State Highway 94/Newt Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1251	212	135	1118	591	138	1567	42	295	917	18
Future Volume (vph)	3	1251	212	135	1118	591	138	1567	42	295	917	18
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3433	3539	1583
Flt Permitted	0.090			0.082			0.110			0.950		
Satd. Flow (perm)	168	3539	1583	153	3539	1583	205	5085	1583	3433	3539	1583
Satd. Flow (RTOR)			64			126			123			123
Lane Group Flow (vph)	3	1360	230	147	1215	642	150	1703	46	321	997	20
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	5	3	8	1	5	2	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	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	11.0	11.0	9.5	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	9.5	50.4	16.0	10.6	51.5	17.0	16.0	42.0	42.0	17.0	43.0	43.0
Total Split (%)	7.9%	42.0%	13.3%	8.8%	42.9%	14.2%	13.3%	35.0%	35.0%	14.2%	35.8%	35.8%
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	4.0	3.5	3.5	4.0	3.5	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	6.0	5.5	5.5	6.0	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Act Effct Green (s)	50.9	44.4	60.1	55.8	53.1	70.1	45.7	36.5	36.5	11.0	37.8	37.8
Actuated g/C Ratio	0.42	0.37	0.50	0.47	0.44	0.58	0.38	0.30	0.30	0.09	0.32	0.32
v/c Ratio	0.02	1.03	0.27	0.96	0.77	0.65	0.73	1.10	0.08	1.02	0.89	0.03
Control Delay (s/veh)	18.0	65.1	14.2	88.0	33.2	17.7	46.0	95.4	0.2	110.1	50.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	65.1	14.2	88.0	33.2	17.7	46.0	95.4	0.2	110.1	50.7	0.1
LOS	B	E	B	F	C	B	D	F	A	F	D	A
Approach Delay (s/veh)		57.7			32.3			89.2			64.3	
Approach LOS		E			C			F			E	
Queue Length 50th (ft)	1	~602	82	64	398	245	70	~548	0	~136	388	0
Queue Length 95th (ft)	m1	m#721	m95	#202	#597	455	#158	#646	0	#229	#508	0
Internal Link Dist (ft)		1129			1111			1422			686	
Turn Bay Length (ft)	280		240	220		255	365		395	390		415
Base Capacity (vph)	138	1309	828	153	1566	977	209	1546	567	314	1115	583
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	0.02	1.04	0.28	0.96	0.78	0.66	0.72	1.10	0.08	1.02	0.89	0.03

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 43 (36%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

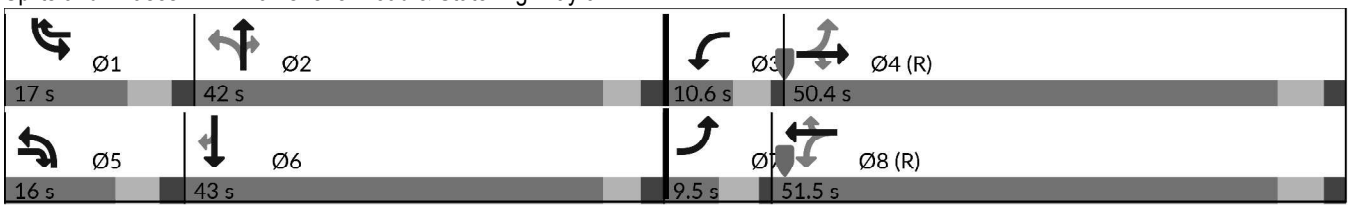
Intersection Signal Delay (s/veh): 60.3	Intersection LOS: E
Intersection Capacity Utilization 99.1%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 4: Marksheffel Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1435	53	386	1437	404	299	38	527	121	39	29
Future Volume (vph)	33	1435	53	386	1437	404	299	38	527	121	39	29
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.112			0.069			0.730			0.730		
Satd. Flow (perm)	209	3539	1583	129	3539	1583	1360	1863	1583	2638	1863	1583
Satd. Flow (RTOR)			136			439			262			136
Lane Group Flow (vph)	36	1560	58	420	1562	439	325	41	573	132	42	32
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	11.0	58.0	58.0	28.0	75.0	75.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	9.2%	48.3%	48.3%	23.3%	62.5%	62.5%	28.3%	28.3%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	57.0	52.0	52.0	80.0	73.4	73.4	28.0	28.0	28.0	28.0	28.0	28.0
Actuated g/C Ratio	0.48	0.43	0.43	0.67	0.61	0.61	0.23	0.23	0.23	0.23	0.23	0.23
v/c Ratio	0.21	1.01	0.07	1.08	0.72	0.38	1.02	0.09	1.00	0.21	0.09	0.06
Control Delay (s/veh)	13.0	61.5	0.1	95.8	14.8	1.6	102.8	36.9	64.4	38.2	36.9	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 (s/veh)	13.0	61.5	0.1	95.8	14.8	1.6	102.8	36.9	64.4	38.2	36.9	0.2
LOS	B	E	A	F	B	A	F	D	E	D	D	A
Approach Delay (s/veh)		58.3			26.5			76.5			32.1	
Approach LOS		E			C			E			C	
Queue Length 50th (ft)	9	~652	0	~311	366	21	~268	25	~278	42	26	0
Queue Length 95th (ft)	20	#812	0	m#347	m362	m13	#450	56	#521	71	56	0
Internal Link Dist (ft)		4339			5250			1103			921	
Turn Bay Length (ft)	500		440	500		375	315		275	530		415
Base Capacity (vph)	164	1533	763	386	2164	1138	317	434	570	615	434	473
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	0.22	1.02	0.08	1.09	0.72	0.39	1.03	0.09	1.01	0.21	0.10	0.07

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

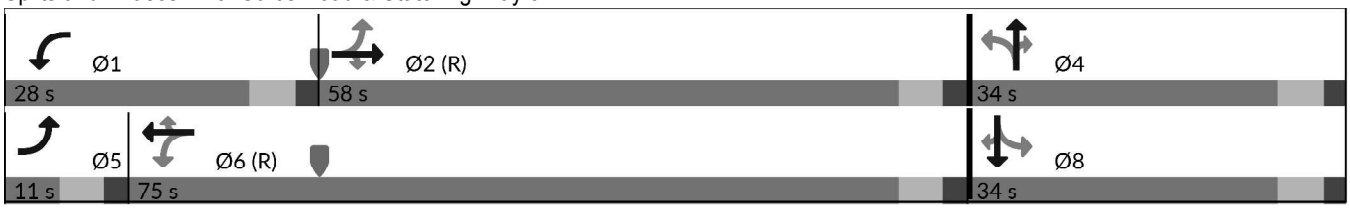
Intersection Signal Delay (s/veh): 45.8	Intersection LOS: D
Intersection Capacity Utilization 99.3%	ICU Level of Service F
Analysis Period (min) 15	

~ 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.

Splits and Phases: 5: Curtis Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	932	1142	32	600	0	1609	0	38	0	0	0
Future Volume (vph)	2	932	1142	32	600	0	1609	0	38	0	0	0
Satd. Flow (prot)	1770	3539	1583	1770	3539	0	3433	1863	1583	0	1863	1863
Flt Permitted	0.242			0.114			0.757					
Satd. Flow (perm)	451	3539	1583	212	3539	0	2736	1863	1583	0	1863	1863
Satd. Flow (RTOR)			1040						740			
Lane Group Flow (vph)	2	1013	1241	35	652	0	1749	0	41	0	0	0
Turn Type	Perm	NA	Free	Perm	NA		Perm		Free			Perm
Protected Phases		2			6			4			8	
Permitted Phases	2		Free	6			4		Free	8		8
Detector Phase	2	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Total Split (s)	41.0	41.0		41.0	41.0		79.0	79.0		79.0	79.0	79.0
Total Split (%)	34.2%	34.2%		34.2%	34.2%		65.8%	65.8%		65.8%	65.8%	65.8%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	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)	6.0	6.0		6.0	6.0		6.0	6.0			6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effct Green (s)	35.0	35.0	120.0	35.0	35.0		73.0		120.0			
Actuated g/C Ratio	0.29	0.29	1.00	0.29	0.29		0.61		1.00			
v/c Ratio	0.01	0.98	0.78	0.57	0.63		1.05		0.02			
Control Delay (s/veh)	34.0	57.8	12.0	78.4	47.6		61.1		0.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)	34.0	57.8	12.0	78.4	47.6		61.1		0.0			
LOS	C	E	B	E	D		E		A			
Approach Delay (s/veh)		32.7			49.2			59.7				
Approach LOS		C			D			E				
Queue Length 50th (ft)	1	441	415	23	230		~761		0			
Queue Length 95th (ft)	m2	m440	m403	m#70	306		#897		0			
Internal Link Dist (ft)		5250			516			1506			706	
Turn Bay Length (ft)	115		600	190					340			
Base Capacity (vph)	131	1032	1583	61	1032		1664		1583			
Starvation Cap Reductn	0	0	0	0	0		0		0			
Spillback Cap Reductn	0	0	0	0	0		0		0			
Storage Cap Reductn	0	0	0	0	0		0		0			
Reduced v/c Ratio	0.02	0.98	0.78	0.57	0.63		1.05		0.03			

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

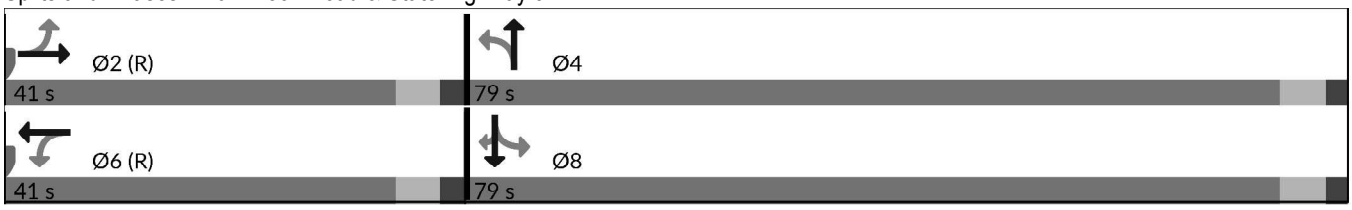
Intersection Signal Delay (s/veh): 45.3	Intersection LOS: D
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	

~ 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.

Splits and Phases: 6: Enoch Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	831	98	102	539	12	74	51	69	38	0	88
Future Volume (vph)	53	831	98	102	539	12	74	51	69	38	0	88
Satd. Flow (prot)	0	1857	1583	1770	1857	0	1770	1863	1583	0	1660	0
Flt Permitted		0.932		0.147			0.714				0.735	
Satd. Flow (perm)	0	1736	1583	274	1857	0	1330	1863	1583	0	1239	0
Satd. Flow (RTOR)			136		2				136		82	
Lane Group Flow (vph)	0	961	107	111	599	0	80	55	75	0	137	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	85.0	85.0	11.0	85.0		11.0	13.0	13.0	11.0	13.0	
Total Split (%)	9.2%	70.8%	70.8%	9.2%	70.8%		9.2%	10.8%	10.8%	9.2%	10.8%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	Max	None	
Act Effct Green (s)		81.3	81.3	92.5	92.5		10.6	6.7	6.7		10.7	
Actuated g/C Ratio		0.68	0.68	0.77	0.77		0.09	0.06	0.06		0.09	
v/c Ratio		0.81	0.09	0.40	0.41		0.59	0.52	0.34		0.67	
Control Delay (s/veh)		42.0	2.9	8.7	8.9		65.5	73.6	4.3		37.8	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay (s/veh)		42.0	2.9	8.7	8.9		65.5	73.6	4.3		37.8	
LOS		D	A	A	A		E	E	A		D	
Approach Delay (s/veh)		38.1			8.9			45.8			37.8	
Approach LOS		D			A			D			D	
Queue Length 50th (ft)		492	6	32	206		56	42	0		38	
Queue Length 95th (ft)		m514	m7	m40	332		105	#88	2		#103	
Internal Link Dist (ft)		4455			2488			370			1227	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1176	1116	275	1432		135	108	220		206	
Starvation Cap Reductn		0	0	0	0		0	0	0		0	
Spillback Cap Reductn		0	0	0	0		0	0	0		0	
Storage Cap Reductn		0	0	0	0		0	0	0		0	
Reduced v/c Ratio		0.82	0.10	0.40	0.42		0.59	0.51	0.34		0.67	

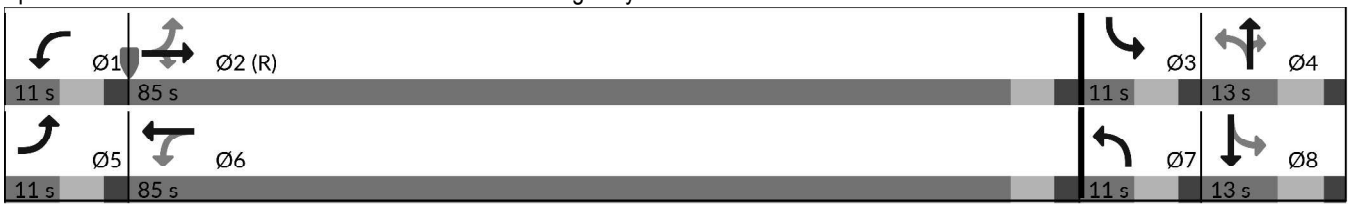
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay (s/veh): 29.1	Intersection LOS: C
Intersection Capacity Utilization 104.9%	ICU Level of Service G
Analysis Period (min) 15	

\# 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.

Splits and Phases: 7: Access B/Slocum Road & State Highway 94



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	633	303	163	406	0	257	0	69	0	0	0
Future Volume (vph)	2	633	303	163	406	0	257	0	69	0	0	0
Satd. Flow (prot)	0	1863	1583	1770	1863	0	1770	1863	1583	0	1863	0
Flt Permitted		0.999		0.232			0.950					
Satd. Flow (perm)	0	1861	1583	432	1863	0	1770	1863	1583	0	1863	0
Satd. Flow (RTOR)			245						258			
Lane Group Flow (vph)	0	690	329	177	441	0	279	0	75	0	0	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt		Perm			
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4		4	8		
Detector Phase	5	2	2	1	6		7	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Total Split (s)	11.0	63.0	63.0	15.0	67.0		31.0	31.0	31.0	11.0	11.0	
Total Split (%)	9.2%	52.5%	52.5%	12.5%	55.8%		25.8%	25.8%	25.8%	9.2%	9.2%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	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)		6.0	6.0	6.0	6.0		6.0	6.0	6.0		6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	Max		None	None	None	Max	None	
Act Effct Green (s)		70.2	70.2	85.6	85.6		22.4		11.4			
Actuated g/C Ratio		0.59	0.59	0.71	0.71		0.19		0.10			
v/c Ratio		0.63	0.32	0.42	0.33		0.84		0.19			
Control Delay (s/veh)		21.8	8.1	9.1	7.6		69.9		1.1			
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0			
Total Delay (s/veh)		21.8	8.1	9.1	7.6		69.9		1.1			
LOS		C	A	A	A		E		A			
Approach Delay (s/veh)		17.4			8.1			55.4				
Approach LOS		B			A			E				
Queue Length 50th (ft)		322	59	42	122		206		0			
Queue Length 95th (ft)		441	m117	68	175		#325		0			
Internal Link Dist (ft)		2488			3982			446			1253	
Turn Bay Length (ft)			200	200			200		200			
Base Capacity (vph)		1088	1027	420	1329		368		534			
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		0.63	0.32	0.42	0.33		0.76		0.14			

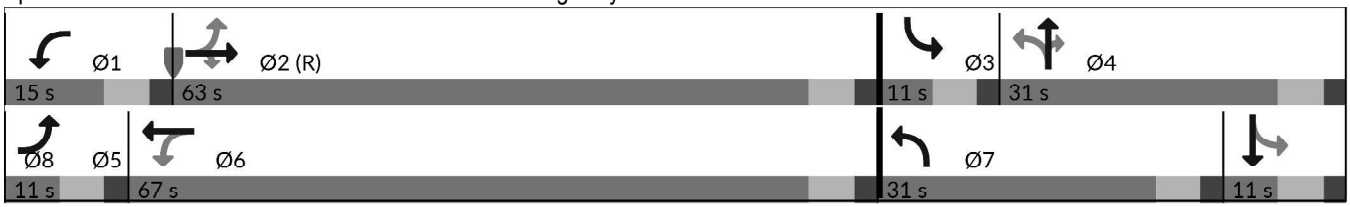
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 21.3	Intersection LOS: C
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

\# 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.

Splits and Phases: 8: Access A/Drake Drive & State Highway 94



Intersection	
Int Delay, s/veh	29.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	518	106	26	347	36	115	6	15	36	17	104
Future Vol, veh/h	98	518	106	26	347	36	115	6	15	36	17	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	515	-	-	520	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	107	563	115	28	377	39	125	7	16	39	18	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	416	0	0	678	0	0	1277	1307	621	1233	1345	397
Stage 1	-	-	-	-	-	-	834	834	-	453	453	-
Stage 2	-	-	-	-	-	-	443	473	-	779	891	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1143	-	-	914	-	-	143	160	488	154	152	653
Stage 1	-	-	-	-	-	-	363	383	-	586	570	-
Stage 2	-	-	-	-	-	-	594	558	-	389	361	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1143	-	-	914	-	-	~ 91	140	488	125	133	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 91	140	-	125	133	-
Stage 1	-	-	-	-	-	-	329	348	-	568	552	-
Stage 2	-	-	-	-	-	-	460	541	-	334	327	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.15	0.58	260.21	37.79
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	91	286	1143	-	-	914	-	-	273
HCM Lane V/C Ratio	1.37	0.08	0.093	-	-	0.031	-	-	0.624
HCM Control Delay (s/veh)	$ 304.3	18.7	8.5	-	-	9.1	-	-	37.8
HCM Lane LOS	F	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	9.3	0.3	0.3	-	-	0.1	-	-	3.8

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

Intersection	
Int Delay, s/veh	74.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	480	1167	0	683	491
Future Vol, veh/h	0	480	1167	0	683	491
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	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	522	1268	0	742	534

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3020	634	0	0	1268	0
Stage 1	1268	-	-	-	-	-
Stage 2	1752	-	-	-	-	-
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	9	~ 422	-	-	~ 544	-
Stage 1	228	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Platoon blocked, %	0		-	-		-
Mov Cap-1 Maneuver	0	~ 422	-	-	~ 544	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	154.1	0	115.21
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	~ 544	-
HCM Lane V/C Ratio	-	-	1.237	1.366	-
HCM Control Delay (s/veh)	-	-	154.1	198	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	21.6	33.2	-

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

Intersection	
Int Delay, s/veh	10.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	297	1167	0	364	127
Future Vol, veh/h	0	297	1167	0	364	127
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	323	1268	0	396	138

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2129	634	0	0	1268	0
Stage 1	1268	-	-	-	-	-
Stage 2	860	-	-	-	-	-
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	43	422	-	-	544	-
Stage 1	228	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	12	422	-	-	544	-
Mov Cap-2 Maneuver	12	-	-	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	102	-	-	-	-	-

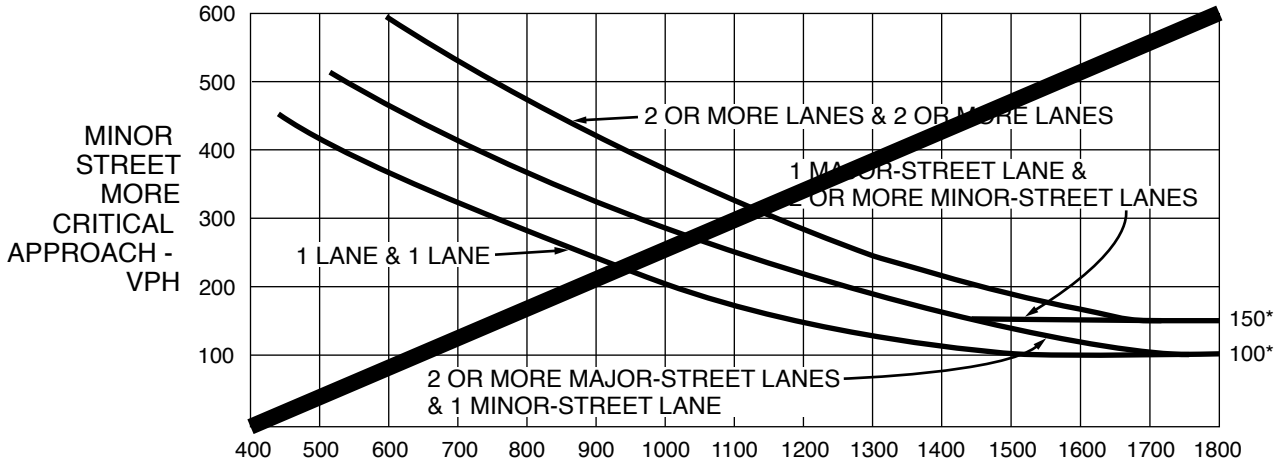
Approach	WB	NB	SB
HCM Control Delay, s/v	36.44	0	20.26
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	544	-
HCM Lane V/C Ratio	-	-	0.766	0.728	-
HCM Control Delay (s/veh)	-	-	36.4	27.3	-
HCM Lane LOS	-	-	E	D	-
HCM 95th %tile Q(veh)	-	-	6.4	6	-

APPENDIX E

Warrant Analysis Forms

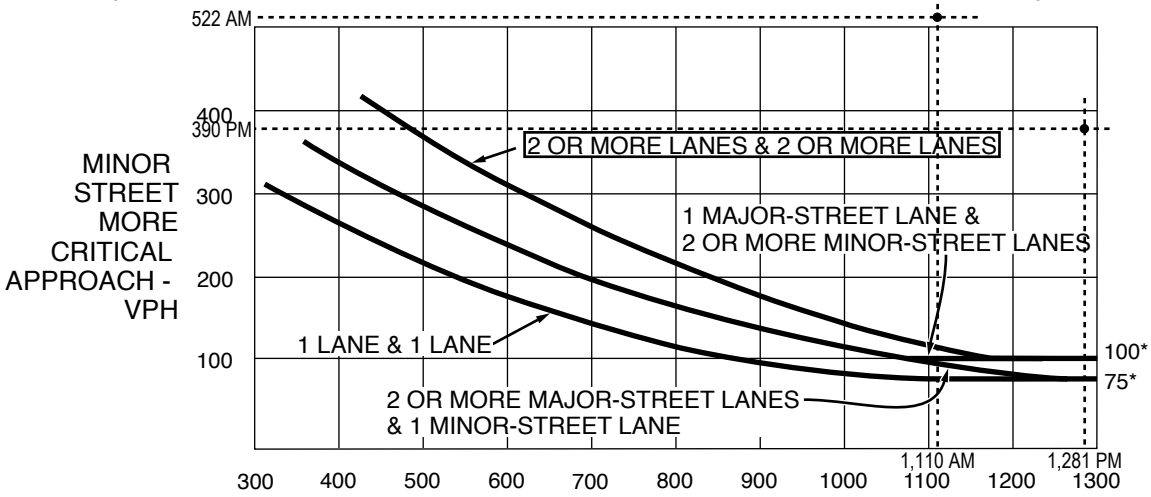
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



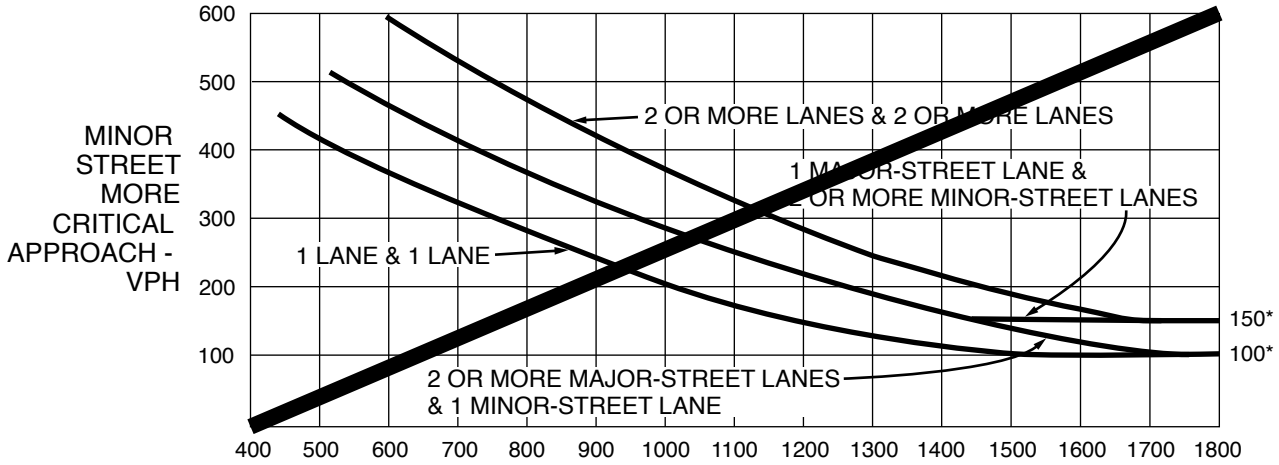
*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Access A

Note: No right turn reduction applied.

State Highway 94 (65 MPH)

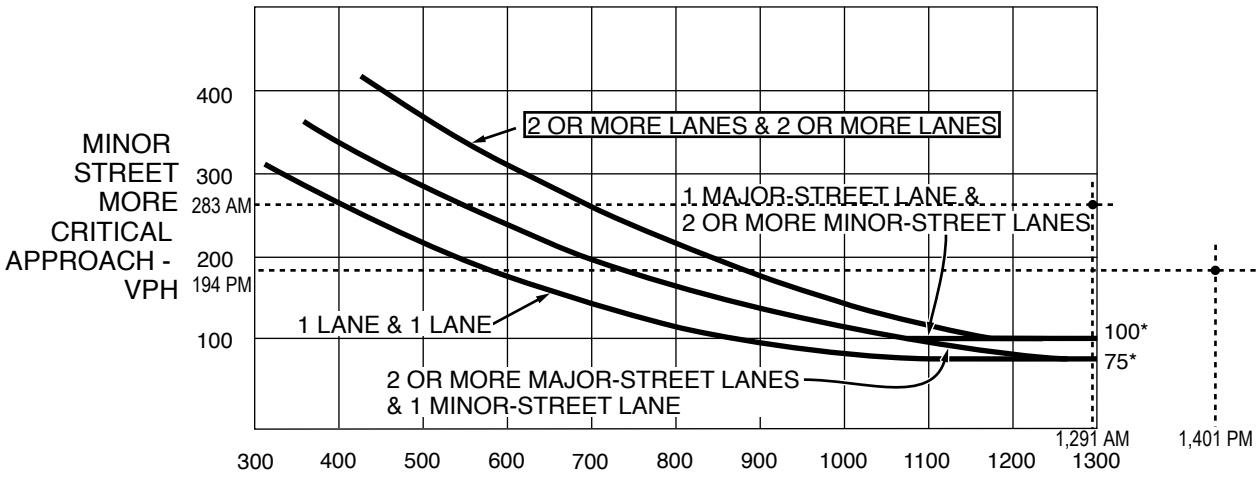
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane

Access B

Note: No right turn reduction applied.

State Highway 94 (65 MPH)

APPENDIX F

Existing Residential Trip Generation

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	DU	9.43	0.18	0.53	0.70	0.59	0.35	0.94

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
210	Single-Family Detached Housing	1 DU	9	0	1	1	1	0	1
		Total:	*9*	*0*	*1*	*1*	*1*	*0*	*1*

Key: DU = Dwelling Units.
Note: All data and calculations above are subject to being rounded to nearest value.