TRAFFIC IMPACT STUDY

For

Banning Lewis Ranch Village C
Colorado Springs, Colorado

October 2024
Revised March 2025

Prepared for:

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24-042153

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I. Introduction

Project Overview

This traffic impact study is provided as a planning document and addresses the capacity, geometric, and control requirements associated with the development entitled Banning Lewis Ranch Village C.

This study has been revised to address review City and CDOT review comments made to the October 2024 version of this traffic study regarding additional intersection analysis, updated geometry, and various associated updates throughout.

This proposed mixed-use development consists of commercial, institutional, recreational, and residential land uses. The development is located to the east of Banning Lewis Parkway, south of Woodmen Road, and north of U.S. Highway in Colorado Springs, Colorado.

Study Area Boundaries

The study area to be examined in this analysis encompasses the Banning Lewis Parkway intersections with Dublin Boulevard and Stetson Hills Boulevard, the E Woodmen Road intersection with Golden Sage Road, the Golden Sage Road intersection with Rolling Thunder Way, the section of U.S. Highway 24 bounded by E Woodmen Road to Marksheffel Road, as well as proposed site accesses.

Figure 1 illustrates location of the site and study intersections.

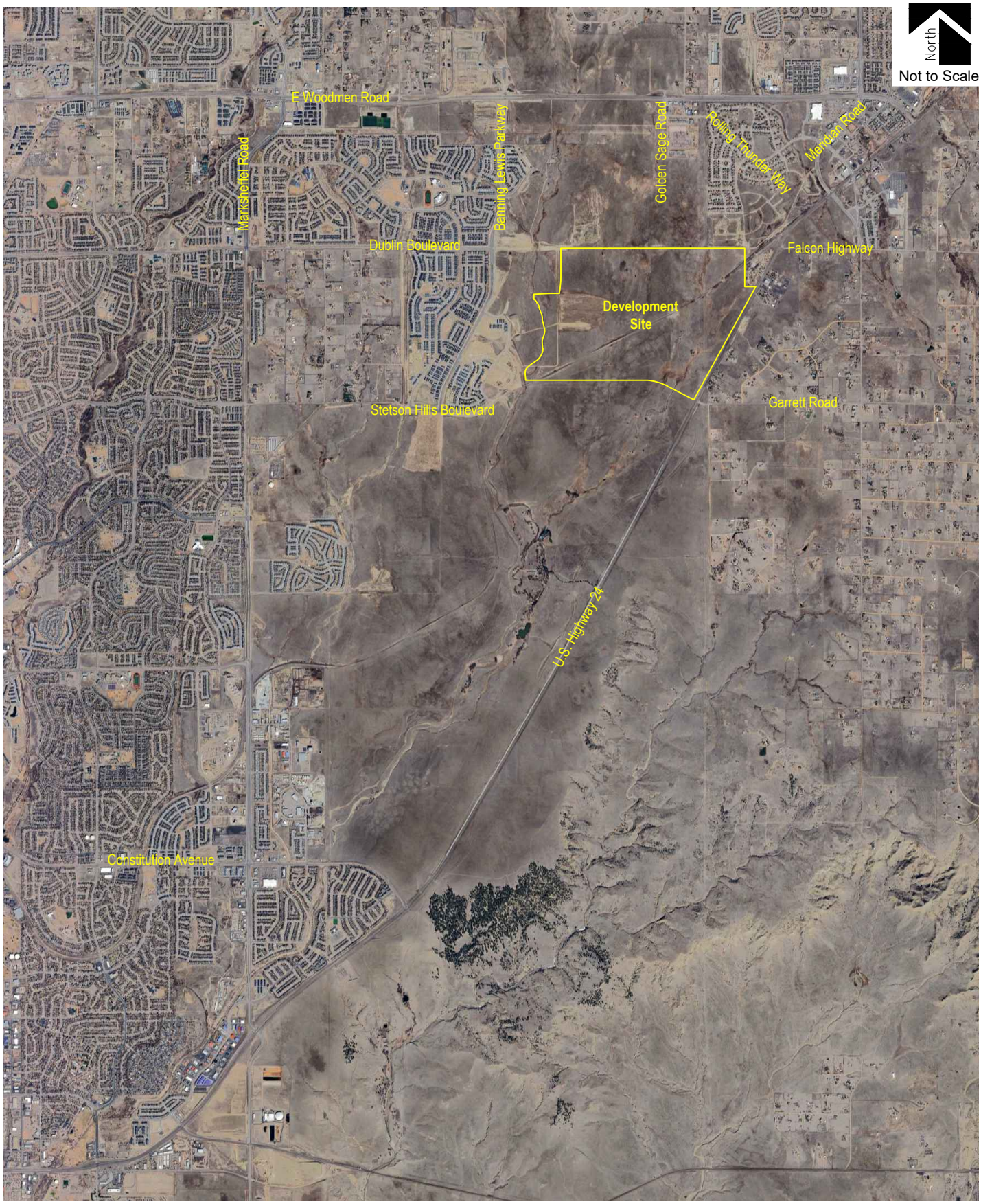
Site Description

Land for the development is currently vacant and surrounded by commercial, institutional, residential, and open space 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 57 acres of public park, 290,000 square feet of shopping center, and 5,000 square feet of fire and rescue station, as well as approximately 2,700 single family detached homes, an elementary school supporting approximately 1,370 students, and a high school supporting approximately 1,980 students.

Access to the development is general and provided at the following locations: one proposed full-movement access onto Rolling Thunder Way provided via the extension of Golden Sage Road, two full-movement accesses onto U.S. Highway 24 provided via the extension of Dublin Boulevard and Stetson Hills Boulevard, and one existing full-movement access onto Banning Lewis Parkway provided via the extension of Stetson Hills Boulevard.

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2027. General site and access locations are shown on Figure 1. A conceptual land use plan, as prepared by LAI Design Group, is shown on Figure 2. This plan is provided for illustrative purposes only.


North
Not to Scale
E Woodmen Road
Marksheffel Road
Banning Lewis Parkway
Golden Sage Road
Rolling Thunder Way
Meridian Road
Dublin Boulevard
Falcon Highway
Development Site
Stetson Hills Boulevard
Garrett Road
U.S. Highway 24
Constitution Avenue

North

Not to Scale

Existing and Committed Surface Transportation Network

Within the study area, Dublin Boulevard, Stetson Hills Boulevard, and Golden Sage Road are the primary roadways that will accommodate traffic to and from the proposed development. The secondary roadways include E Woodmen Road, Banning Lewis Parkway, Garrett Road, Rolling Thunder Way, U.S. Highway 24, Meridian Road, Falcon Highway, Marksheffel Road, and Constitution Avenue. A brief description of each roadway, based on the City of Colorado Springs Major Thoroughfare Plan (MTP)[1], the City of Colorado Spring's Traffic Criteria Manual[2], El Paso County's Master Transportation Corridor Plan (MTCP)[3], and El Paso County's Engineering Criteria Manual (ECM)[4], is provided below:

Dublin Boulevard is an east-west principal arterial roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. Dublin Boulevard provides a posted speed limit of 45 MPH.

Stetson Hills Boulevard is an east-west principal arterial roadway having two through lanes (one lanes in each direction) with exclusive turn lanes at the intersection within the study area. Stetson Hills Boulevard provides a posted speed limit of 45 MPH.

Golden Sage Road is a north-south 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. Golden Sage Road is unclassified in the City's MTP. However, per the City's Traffic Criteria Manual and the roadway's estimated right-of-way (ROW) width, Golden Sage Road is assumed to be classified as a collector roadway with a speed limit of 35 MPH.

E Woodmen Road is an east-west expressway roadway having six through lanes (three lanes in each direction) west of Golden Sage Road and four through lanes (two lanes in each direction) east of Golden Sage Road. E Woodmen Road has exclusive turn lanes at the intersection within the study area. E Woodmen Road provides a posted speed limit of 55 MPH.

Banning Lewis Parkway is a north south principal arterial having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersections within the study area. Banning Lewis Parkway provides a posted speed limit of 45 MPH.

Garrett Road is an east-west minor arterial roadway having two through lanes (one lane in each direction) with shared turn lanes at the intersection within the study area. Garrett Road provides a posted speed limit of 45 MPH.

[1] City of Colorado Springs Major Thoroughfare Plan, City of Colorado Springs, Department of Public Works, June 2, 2022.
[2] Engineering Criteria Manual, Section III: Traffic Criteria Manual, City of Colorado Springs City Engineering, July 2010.
[3] El Paso County 2016 Major Transportation Corridors Plan Update, Felsburg Holt & Ullevig, December 2016.
[4] El Paso County Engineering Criteria Manual, El Paso County, July 2023.

Rolling Thunder Way is an east-west roadway having three through lanes (one lane in each direction with a two-way-left-turn lane) with a shared turn lane at the intersection within the study area. Rolling Thunder Way is unclassified in the City's MTP. However, per the City's Traffic Criteria Manual and the roadway's estimated ROW width, Rolling Thunder Way is assumed to be classified as a collector roadway with a posted speed limit of 35 MPH.

U.S. Highway 24 is a northeast-southwest roadway having two through lanes (one lane in each direction) with exclusive turn lanes at the intersection within the study area. The Colorado Department of Transportation (CDOT) categorizes the adjacent segment of U.S. Highway 24 as an Expressway (E-X) and provides a posted speed limit of 55 MPH.

Meridian Road is a north-south roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersections within the study area. Meridian Road provides a posted speed limit of 40 MPH. North of U.S. Highway 24, Meridian Road is a minor arterial County roadway. South of U.S. Highway 24, Meridian Road is a principal arterial City roadway.

Falcon Highway is an east-west principal arterial roadway having two through lanes (one lanes in each direction) with exclusive turn lanes at the intersection within the study area. Falcon Highway provides a posted speed limit of 45 MPH.

Constitution Avenue is generally an east-west principal arterial roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. Constitution Avenue provides a posted speed limit of 50 MPH.

Marksheffel Road is a north-south principal arterial roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. Marksheffel Road provides a posted speed limit of 50 MPH.

The study intersections of E Woodmen Road with Golden Sage Road and the intersections U.S. Highway 24 with E Woodmen Road, Meridian Road, Falcon Highway, Garrett Road, Constitution Avenue, and Marksheffel Road are signalized. All other study intersections 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.

Pursuant to U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report[5], it was recommended that U.S. Highway 24 be expanded north of Meridian Road to provide an additional through lane in each direction by Year 2027.

Pursuant to the County's ECM, E Woodmen Road will be widened from four to six through lanes from Golden Sage Road to U.S. Highway 24. However, the County's transportation plan does not mention when this will occur. For analysis purposes, it is assumed this improvement to be completed by Year 2045.

[5] US Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report, HDR, Inc., August 2024.

Comparison of existing roadway cross-sections of Stetson Hills Boulevard and Dublin Boulevard to the City's Traffic Criteria Manual concludes that each roadway is not built to their ultimate width for accommodation of future regional transportation demands. Stetson Hills Boulevard has the potential to provide either four through lanes or six through lanes. Dublin Boulevard has the potential to provide six through lanes in each direction. For analysis purposes it was assumed that Dublin Boulevard provides four through lanes by Year 2027 and, in coordination with City Staff, that Stetson Hills Boulevard provides two through lanes in Year 2027 and four through lanes in Year 2045.

It is important to note that roadway extensions are currently planned for Banning Lewis Parkway and Stetson Hills Boulevard. It is understood that Banning Lewis Parkway will extend south and intersect with U.S. Highway 24 and that Stetson Hills Boulevard will extend west and intersect with Marksheffel Road. However, considering the City and PPRTA currently have no commitments or timelines for these roadway extensions, these extensions were not analyzed.

No other regional or specific improvements for the above-described roadways are known to be planned or committed at this time. The remaining study area roadways appear to be built to their ultimate cross-sections.

II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the following intersections:

- Banning Lewis Parkway / Dublin Boulevard
- Banning Lewis Parkway / Stetson Hills Boulevard
- Woodmen Road / Golden Sage Road
- Golden Sage Road / Rolling Thunder Way
- U.S. Highway 24 / Garret Road
- U.S. Highway 24 / Constitution Avenue
- U.S. Highway 24 / Marksheffel Road

Average daily traffic (ADT) volumes were collected over a 24-hour period on Dublin Boulevard, Banning Lewis Parkway, and U.S. Highway 24. Counts for the U.S. Highway 24 intersections with Constitution Avenue and Marksheffel Road were collected on Wednesday February 26, 2025. All other counts were collected on Wednesday, August 7, 2024. AM peak hour counts were collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts were collected during the period of 4:00 p.m. to 6:00 p.m.

Additionally, peak hour traffic counts shown for the U.S. Highway 24 intersections with E Woodmen Road, Meridian Road, and Falcon Highway were referenced from the U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report which were understood to be collected during the year 2023.

Collected counts during Year 2024 and the referenced counts from the U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report were then grown to Year 2025 at an annual growth rate of 1.3 percent. The 1.3 percent 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 U.S. Highway 24 at Garret Road.

The study area intersections and ADT volumes are shown on Figure 3. Newly collected intersection counts and intersection geometry are shown in Figure 4 and Figure 5, respectively. Traffic count data is included for reference in Appendix A.

Existing signal timing parameters for the Woodmen Road intersection with Golden Sage Road, and the intersection of U.S. Highway 24 and Garrett Road were obtained from the City and CDOT and used throughout this study to the best extent possible in order to remain consistent with existing signal coordination plans. City and CDOT signal timing information received is included for reference in Appendix A.

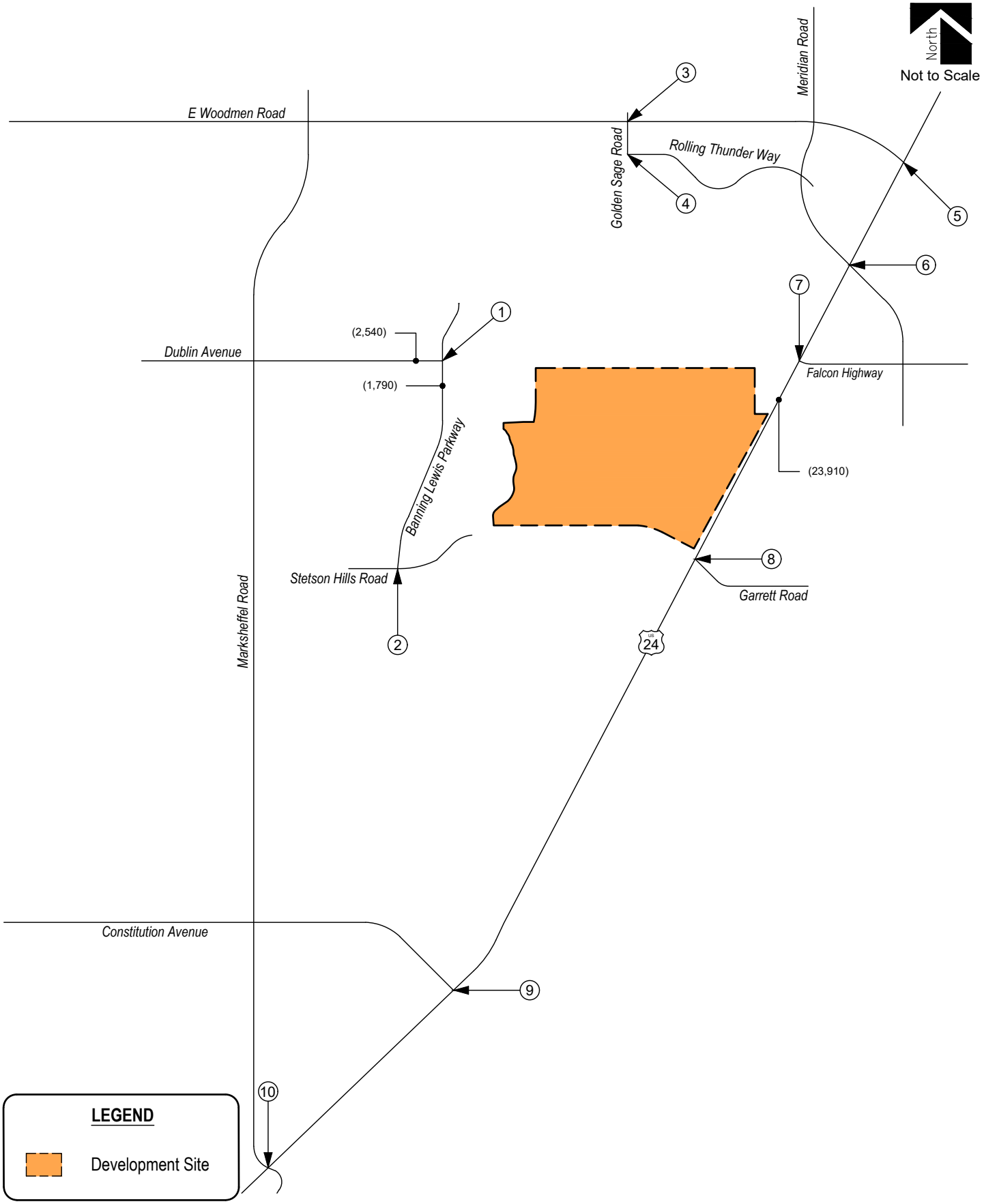
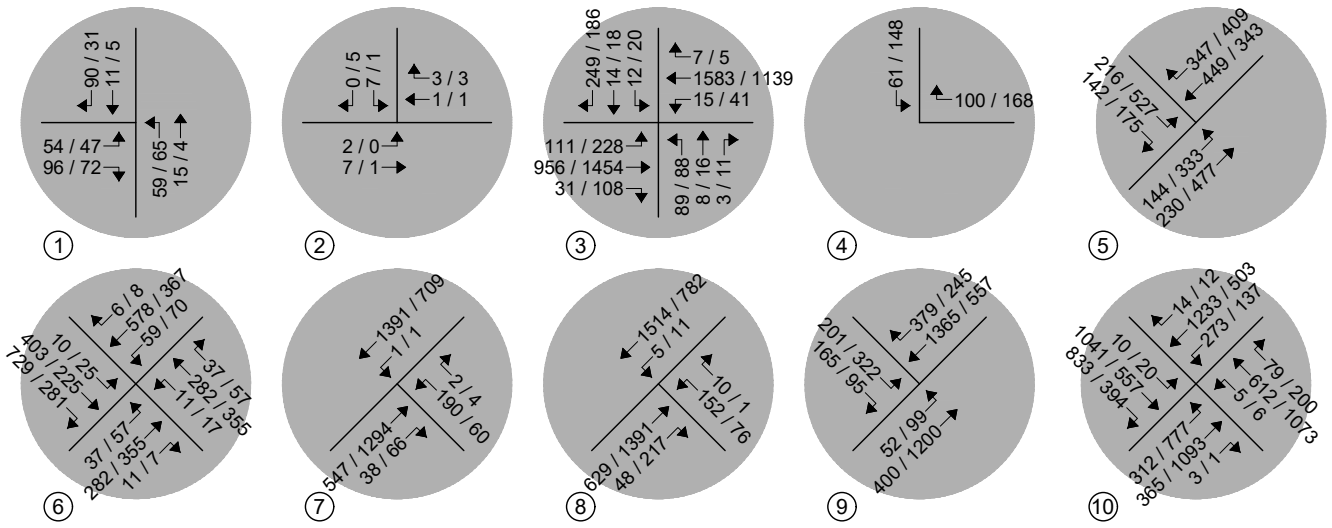


Figure 3
EXISTING ROADWAY NETWORK
(ADT) : Average Daily Traffic



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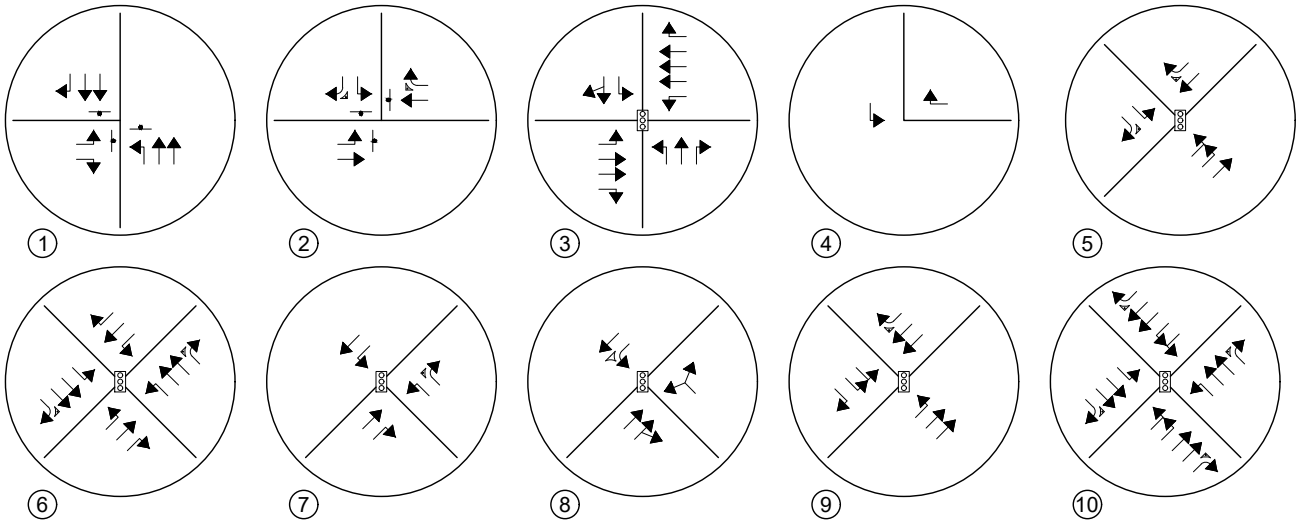
Study Intersection Volumes

Figure 4
EXISTING TRAFFIC VOLUMES
AM / PM Peak Hour

North

Not to Scale



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Study Intersection
Lane Geometry

Figure 5
EXISTING INTERSECTION GEOMETRY
Intersection Geometry

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.

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
E Woodmen Road / Golden Sage Road (Signalized)	C (22.5)	C (20.8)
U.S. Highway 24 / E Woodmen Road (Signalized)	A (8.6)	B (14.3)
U.S. Highway 24 / Meridian Road (Signalized)	B (12.9)	B (13.4)
U.S. Highway 24 / Falcon Highway (Signalized)	D (35.2)	B (11.1)
U.S. Highway 24 / Garrett Road (Signalized)	A (8.6)	A (8.5)
U.S. Highway 24 / Constitution Avenue (Signalized)	B (11.4)	A (9.3)
U.S. Highway 24 / Marksheffel Road (Signalized)	C (34.4)	D (40.2)
Dublin Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Right	A	A
Northbound Left	A	A
Northbound Through	A	A
Southbound Through	A	A
Southbound Right	A	A
Stetson Hills Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Left	A	A
Southbound Left	A	A
Southbound Right	A	A

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 E Woodmen Road and Golden Sage Road has overall operations at LOS C during the morning and afternoon peak traffic hours.

The signalized intersection of U.S. Highway 24 and E Woodmen Road has overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Meridian Road has overall operations at LOS B during the morning and afternoon peak traffic hours.

The signalized intersection of U.S. Highway 24 and Falcon Highway has overall operations at LOS D during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Garrett Road has overall operations at LOS A during the morning and afternoon peak traffic hours.

The signalized intersection of U.S. Highway 24 and Constitution Avenue has overall operations at LOS B during the morning peak traffic hour and LOS A during the afternoon peak traffic hour.

The unsignalized intersection of U.S. Highway 24 and Marksheffel Road has overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The unsignalized intersection of Dublin Boulevard and Banning Lewis Parkway has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The unsignalized intersection of Stetson Hills Boulevard and Banning Lewis Parkway has turning movement operations at LOS A during the morning and afternoon 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 2027 and 2045, a compounded annual growth rate was determined using historical traffic data for the surrounding area provided by CDOT's OTIS along the adjacent segment of U.S. Highway 24 at Garret Road which anticipates a 20-year growth rate of 1.3 percent.

To account for projected traffic from adjacent developments not yet built, trip generations from the Percheron Traffic Impact Study Addendum[6] and the Banning Lewis Ranch Villages A – D Master Traffic Impact Study[7] were added to background traffic volumes.

Pursuant to the area roadway improvements discussed in Section I, Year 2027 background traffic conditions assume the expansion of U.S. Highway 24 to four through lanes where it currently provides two through lanes. Year 2045 background traffic conditions assumes the expansion of E Woodmen Road to six through lanes (three lanes in each direction). Year 2027 assume existing signal timing parameters with optimized intersection splits in effort to better long-term intersection performance. Year 2045 assume existing signal timing parameters with optimized intersection splits in effort to better long-term intersection performance.

Year 2027 and Year 2045 background traffic conditions referenced intersection geometry from the Banning Lewis Ranch Villages A – D traffic study for the the Stetson Hills Boulevard intersection with Banning Lewis Parkway including provision of an additional northbound and southbound through lane to match existing intersection geometry.

The study area intersections and projected short-term background ADT volumes are shown on Figure 6. Projected background intersection traffic volumes and intersection geometry for Year 2027 are shown in Figure 7 and Figure 8, respectively.

The study area intersections and projected long-term background ADT volumes are shown on Figure 9. Projected background intersection traffic volumes and intersection geometry for Year 2045 are shown in Figure 10 and Figure 11, respectively.

[6] Percheron: Traffic Impact Study Addendum, SM ROCHA LLC, October 2021.
[7] Banning Lewis Ranch Villages A – D, Master Traffic Impact Study, LSC Transportation Consultants, Inc. November 2020.

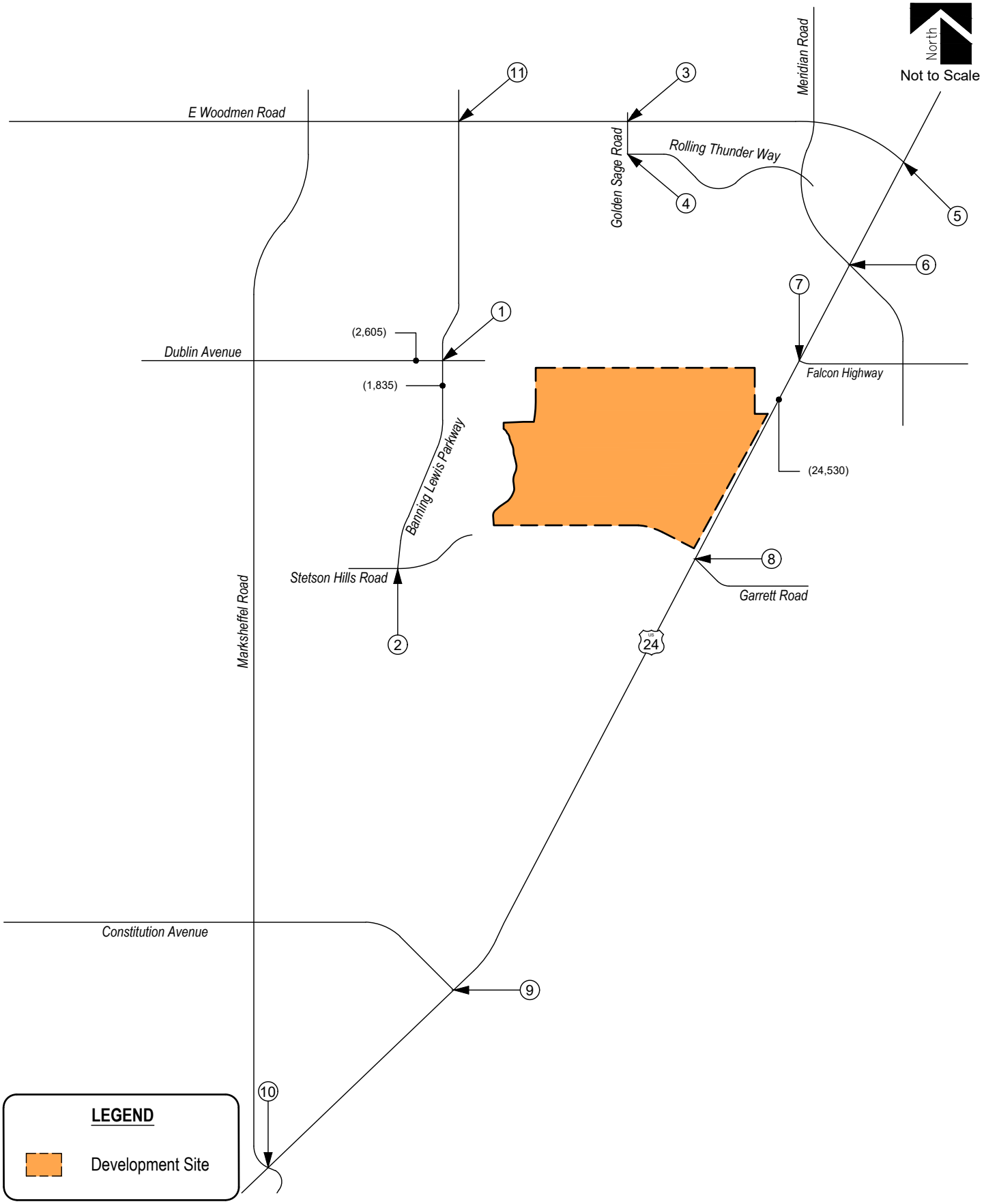
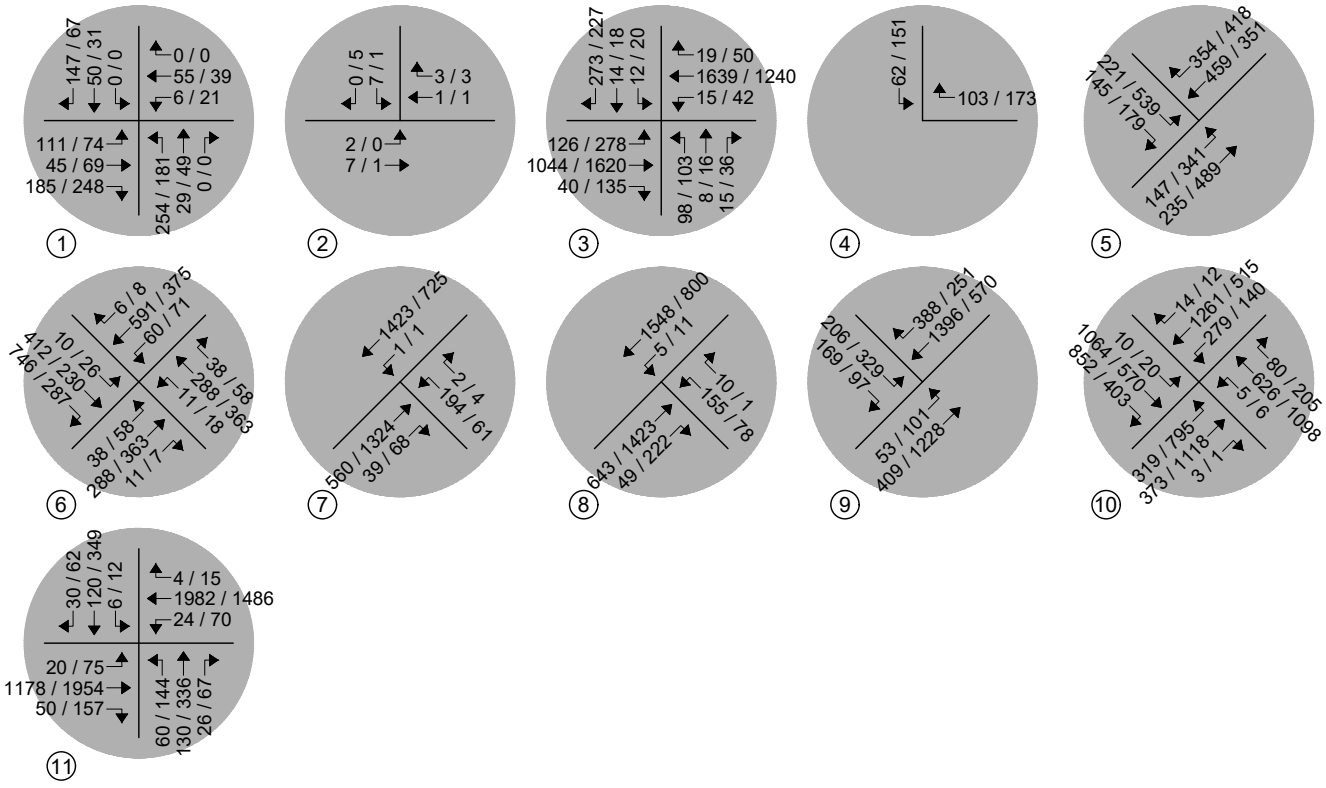


Figure 6
BACKGROUND ROADWAY NETWORK - YEAR 2027
(ADT) : Average Daily Traffic

North
Not to Scale



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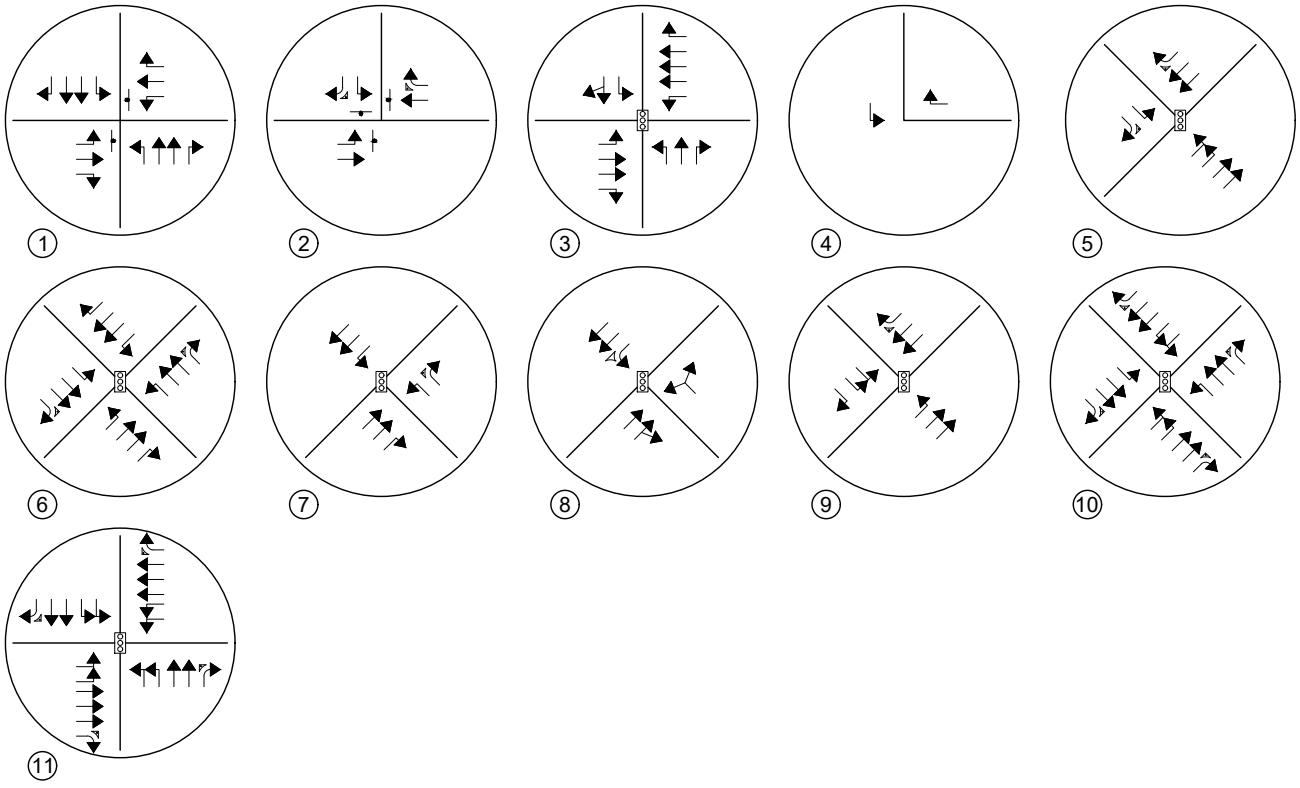
Study Intersection Volumes

Figure 7
BACKGROUND TRAFFIC VOLUMES - YEAR 2027
AM / PM Peak Hour

North

Not to Scale



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Study Intersection
Lane Geometry

Figure 8
BACKGROUND INTERSECTION GEOMETRY - YEAR 2027
Intersection Geometry

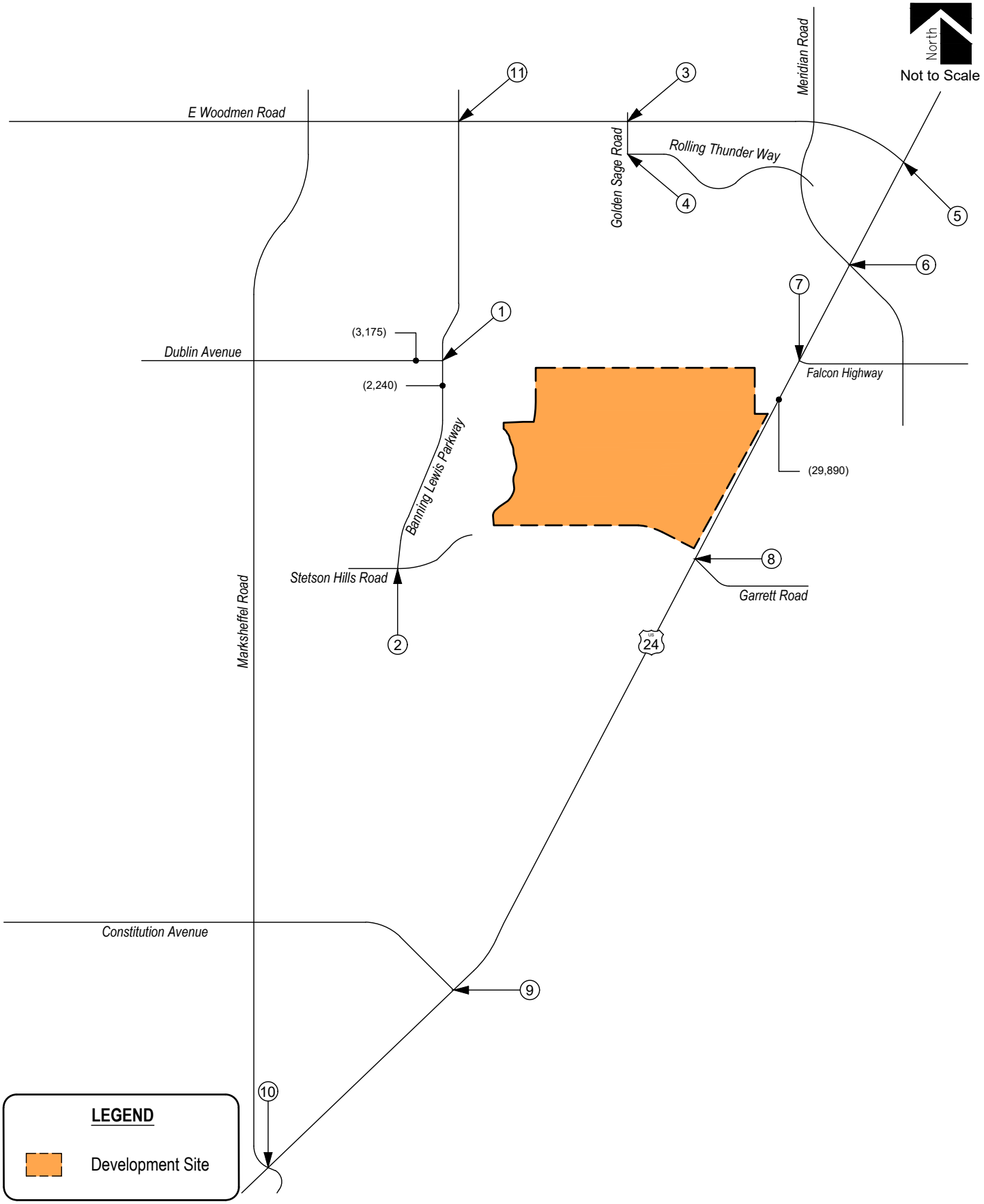
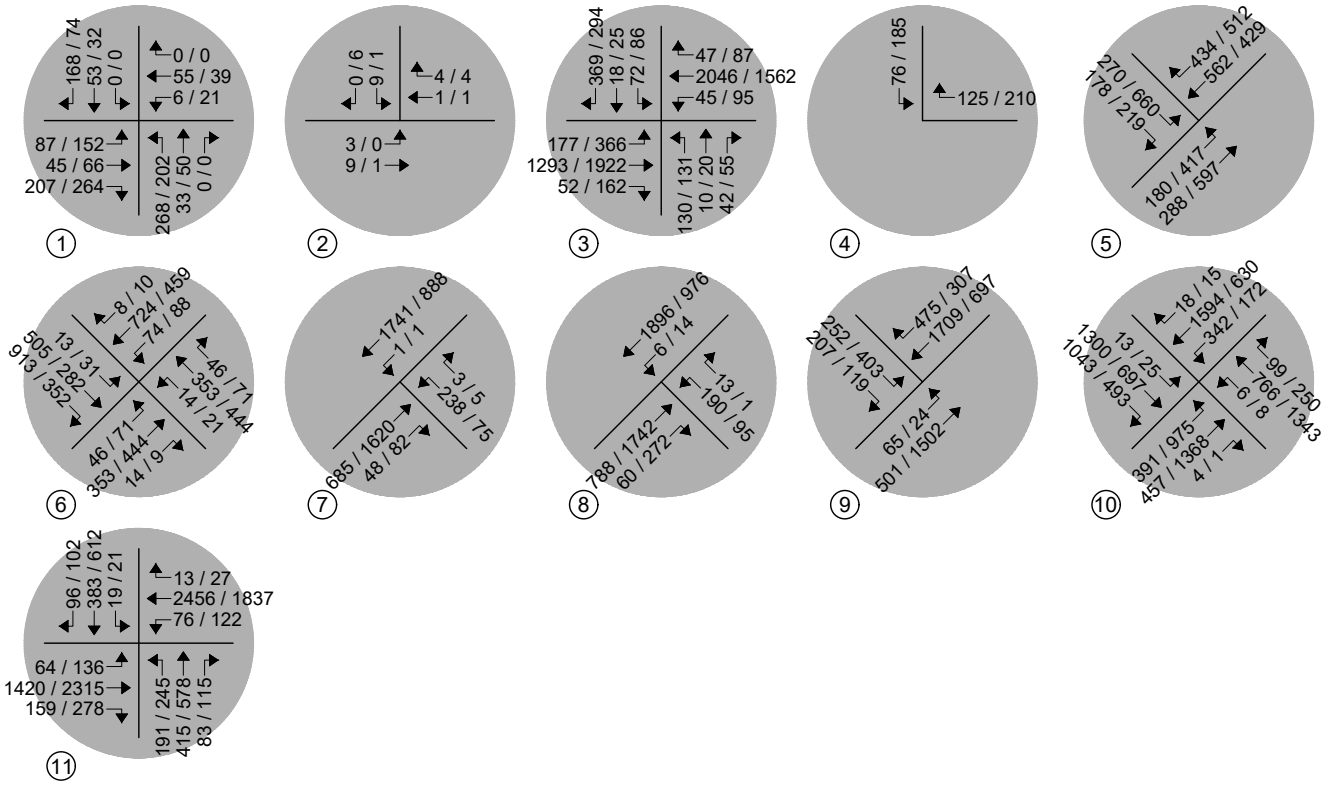


Figure 9
BACKGROUND ROADWAY NETWORK - YEAR 2045
(ADT) : Average Daily Traffic

North

Not to Scale



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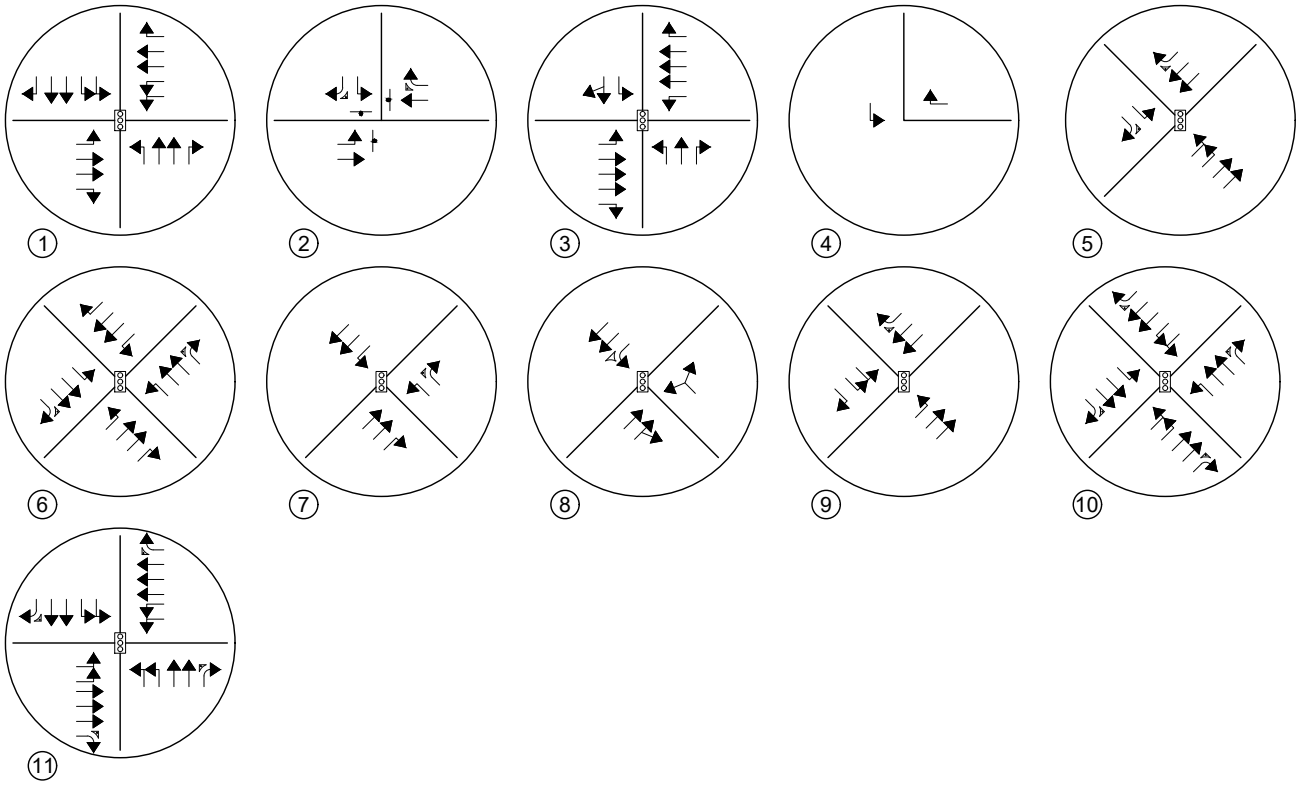
Study Intersection Volumes

Figure 10
BACKGROUND TRAFFIC VOLUMES - YEAR 2045
AM / PM Peak Hour



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Study Intersection
Lane Geometry

Figure 11
BACKGROUND INTERSECTION GEOMETRY - YEAR 2045
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 2027 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 2027

INTERSECTION	LEVEL OF SERVICE	
LANE GROUPS	AM PEAK HOUR	PM PEAK HOUR
E Woodmen Road / Golden Sage Road (Signalized)	C (23.8)	C (27.0)
U.S. Highway 24 / E Woodmen Road (Signalized)	A (7.5)	B (12.7)
U.S. Highway 24 / Meridian Road (Signalized)	B (11.4)	B (12.5)
U.S. Highway 24 / Falcon Highway (Signalized)	B (13.4)	A (4.4)
U.S. Highway 24 / Garrett Road (Signalized)	A (6.7)	A (8.6)
U.S. Highway 24 / Constitution Avenue (Signalized)	B (10.6)	B (10.5)
U.S. Highway 24 / Marksheffel Road (Signalized)	D (38.3)	D (41.3)
Banning Lewis Parkway / E Woodmen Road (Signalized)	B (17.4)	C (33.5)
Dublin Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	E	C
Eastbound Through	C	C
Eastbound Right	A	A
Westbound Left	C	C
Westbound Through	C	C
Westbound Right	A	A
Northbound Left	A	A
Southbound Left	A	A
Stetson Hills Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Left	A	A
Southbound Left	A	A
Southbound Right	A	A

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

Background Traffic Analysis Results – Year 2027

Year 2027 background traffic analysis indicates that the signalized intersection of E Woodmen Road and Golden Sage Road has overall operations at LOS C during the morning and afternoon peak traffic hours.

The signalized intersections along U.S. Highway 24 are expected to provide overall operations at LOS D or better during the morning and afternoon peak traffic hours.

The signalized intersection of Banning Lewis Parkway and E Woodmen Road is projected to have overall operations at LOS B during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The stop-controlled intersection of Dublin Boulevard and Banning Lewis Parkway is projected to have turning movement operations at LOS C during the morning and afternoon peak traffic hours. Exceptions include the eastbound left turning movement which is expected to provide LOS E operations during the morning peak traffic hour. The LOS E operation is attributed to the northbound turning volumes and the stop-controlled nature of the intersection.

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

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
E Woodmen Road / Golden Sage Road (Signalized)	D (43.5)	D (39.9)
U.S. Highway 24 / E Woodmen Road (Signalized)	A (8.2)	B (14.4)
U.S. Highway 24 / Meridian Road (Signalized)	B (12.4)	B (12.6)
U.S. Highway 24 / Falcon Highway (Signalized)	B (18.4)	A (5.6)
U.S. Highway 24 / Garrett Road (Signalized)	A (7.4)	B (10.6)
U.S. Highway 24 / Constitution Avenue (Signalized)	B (17.2)	B (13.5)
U.S. Highway 24 / Marksheffel Road (Signalized)	E (73.3)	E (73.0)
U.S. Highway 24 / Marksheffel Road (Signalized)	*C (30.8)*	*D (37.6)*
Banning Lewis Parkway / E Woodmen Road (Signalized)	D (40.1)	E (66.2)
Banning Lewis Parkway / E Woodmen Road (Signalized)	*C (31.7)*	*D (43.1)*
Dublin Boulevard / Banning Lewis Parkway (Signalized)	A (9.9)	B (12.0)
Stetson Hills Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Left	A	A
Southbound Left	A	A
Southbound Right	A	A

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 study intersection of E Woodmen Road and Golden Sage Road experiences LOS D operations during the morning and afternoon peak traffic hours.

The U.S. Highway 24 intersection with E Woodmen Road continues to project overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Meridian Road continues to project overall operations at LSO B During the morning and afternoon peak traffic hours.

The signalized intersection of U.S. Highway 24 and Falcon Highway continues to project overall operations at LOS B during the morning peak traffic hour and LOS A during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Garrett Road is expected to provide overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Constitution Avenue continues to expect overall operations at LOS B during the morning and afternoon peak traffic hours.

The signalized intersection of U.S. Highway 24 and Marksheffel Road is projected to have overall operations at LOS E during the morning and afternoon peak traffic hours. The LOS E operations are attributed to the through traffic volumes in each direction. Potential mitigations may include provision of an additional through lane in each direction. Additional capacity worksheets provided in Appendix D.

The signalized intersection of E Woodmen Road and Banning Lewis Parkway has overall operations at LOS D during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The LOS E operations are attributed to the high through volumes E Woodmen Road. Potential mitigation may include provision of a fourth through lane along E Woodmen Road. Additional capacity worksheets provided in Appendix D.

The signalized intersection of Dublin Boulevard and Banning Lewis Parkway is projected to have overall operations at LOS A during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The stop-controlled intersection of Stetson Hills Boulevard and Banning Lewis Parkway continues to project turning movement operations at LOS A during the morning and afternoon 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 use in order to estimate average daily traffic (ADT), AM Peak Hour, and PM Peak Hour vehicle trips. Peak hour volumes were derived from standard relationships of ADT volumes versus peak hour volumes for ITE land use code 575 (Fire and Rescue Station). 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), 411 (Public Park), 520 (Elementary School), 525 (High School), 575 (Fire and Rescue Station), and 820 (Shopping Center (>150k)) were used for estimating trip generation because of their conservative rates and best fit to the proposed land use descriptions.

Due to the conceptual nature of the proposed development, no specific commercial land uses have been determined. As such, a floor-area-ratio (FAR) of 0.25 was applied to the commercial areas of the Banning Lewis Ranch Village C.

As actual land uses, densities, or site plans within the Banning Lewis Ranch Village 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

			TRIP GENERATION RATES						
ITE			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	0.53	0.70	0.59	0.35	0.94
411	Public Park	ACRE	0.78	0.01	0.01	0.02	0.06	0.05	0.11
520	Elementary School	STU	2.27	0.57	0.44	1.01	0.12	0.14	0.26
525	High School	STU	1.94	0.40	0.34	0.74	0.07	0.09	0.16
575	Fire and Rescue Station	KSF	*	*	*	*	0.13	0.34	0.48
820	Shopping Center (>150k)	KSF	37.01	0.52	0.32	0.84	1.63	1.77	3.40

Key: DU = Dwelling Units. ACRE = Acres. STU = Students. KSF = Thousand Square Feet Gross Floor Area.
* = ITE does not report significant AM peak hour generation.
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	2,683 DU	25,301	470	1,409	1,878	1,589	933	2,522
411	Public Park	57.2 ACRE	45	1	0	1	3	3	6
520	Elementary School	1,371 STU	3,112	775	609	1,385	164	192	356
525	High School	1,984 STU	3,849	793	675	1,468	146	171	317
575	Fire and Rescue Station **	5.0 KSF	17	1	1	2	1	1	2
820	Shopping Center (>150k)	289.7 KSF	10,721	151	92	243	473	512	985
		Total:	*43,044*	*2,190*	*2,787*	*4,977*	*2,376*	*1,813*	*4,189*

Key: DU = Dwelling Units. ACRE = Acres. STU = Students. KSF = Thousand Square Feet Gross Floor Area.
** = In order to remain conservative, AM is equivalent to PM.
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 43,052 daily vehicle trips with 4,977 of those occurring during the morning peak hour and 4,189 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, two percent and eight percent internal capture rates were applied to AM and PM peak hour trips, respectively, pursuant to guidelines defined within Section 2.3(4)(b) of CDOT's State Highway Access Code (SHAC)[9].

It is important to note that ITE's institutional land uses, such as Fire and Rescue Station, are not subject to internal capture computations. This is due to the nature of such land uses. Additionally, considering the relatively low traffic volumes generated by Fire and Rescue Station, it is likely that only a small portion of trips, if any, will originate within the development area. As such, no internal capture during either peak traffic hour is to be expected.

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.
[9] State Highway Access Code, The Transportation Commission of Colorado, March 2002.

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
	Internal Capture Trip Reduction:		*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
210	Single-Family Detached Housing	2683 DU	24,036	460	1,380	1,841	1,462	859	2,320
	Internal Capture Trip Reduction:		*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
411	Public Park	57.2 ACRE	42	1	0	1	3	3	6
	Internal Capture Trip Reduction:		*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
520	Elementary School	1371 STU	2,957	760	597	1,357	151	177	328
	Internal Capture Trip Reduction:		*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
525	High School	1984 STU	3,657	777	662	1,439	134	158	292
	Internal Capture Trip Reduction:		*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
575	Fire and Rescue Station **	5.0 KSF	17	1	1	2	1	1	2
	Internal Capture Trip Reduction:		*5%*	*2%*	*2%*	*2%*	*8%*	*8%*	*8%*
820	Shopping Center (>150k)	289.7 KSF	10,185	148	91	238	435	471	906
	Reduced Total:		*40,893*	*2,146*	*2,731*	*4,878*	*2,186*	*1,668*	*3,854*

Key: DU = Dwelling Units. ACRE = Acres. STU = Students. KSF = Thousand Square Feet Gross Floor Area.
** = In order to remain conservative, AM is equivalent to PM.
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 40,893 daily trips with 4,878 of those occurring during the morning peak hour and 3,854 during the afternoon peak hour.

Trip Distribution

It is understood that by Year 2045 Dublin Boulevard will extend east to intersect with the existing U.S. Highway 24 intersection with Falcon Highway. In order to account for the change in traffic patterns this extension may create, long term distribution and assignment was redistributed assuming the extension of Dublin Boulevard.

The overall directional distribution of site-generated traffic was determined based on the location of development site within the City, 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)[10].

The study area intersections, projected ADT volumes, and overall trip distribution patterns for the development area for Year 2027 and Year 2045 are shown on Figure 12 and 13, respectively.

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

Trip Assignment

It is again noted that due to the extension of Dublin Boulevard by Year 2045 traffic volumes were redistributed to account for the change in traffic patterns that this extension may create.

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 for Year 2027 and Year 2045, shown on Figure 13 and 15, respectively.

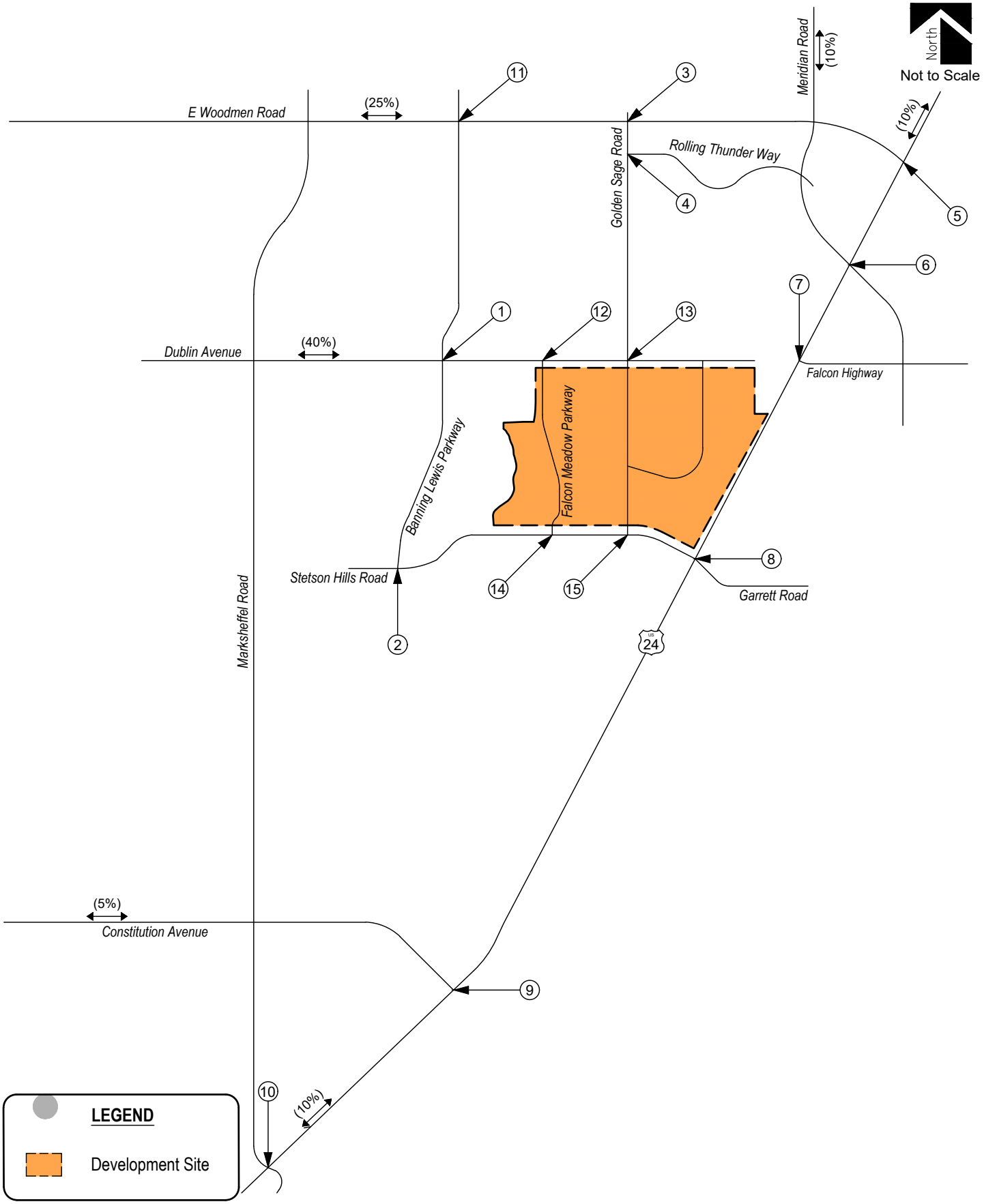
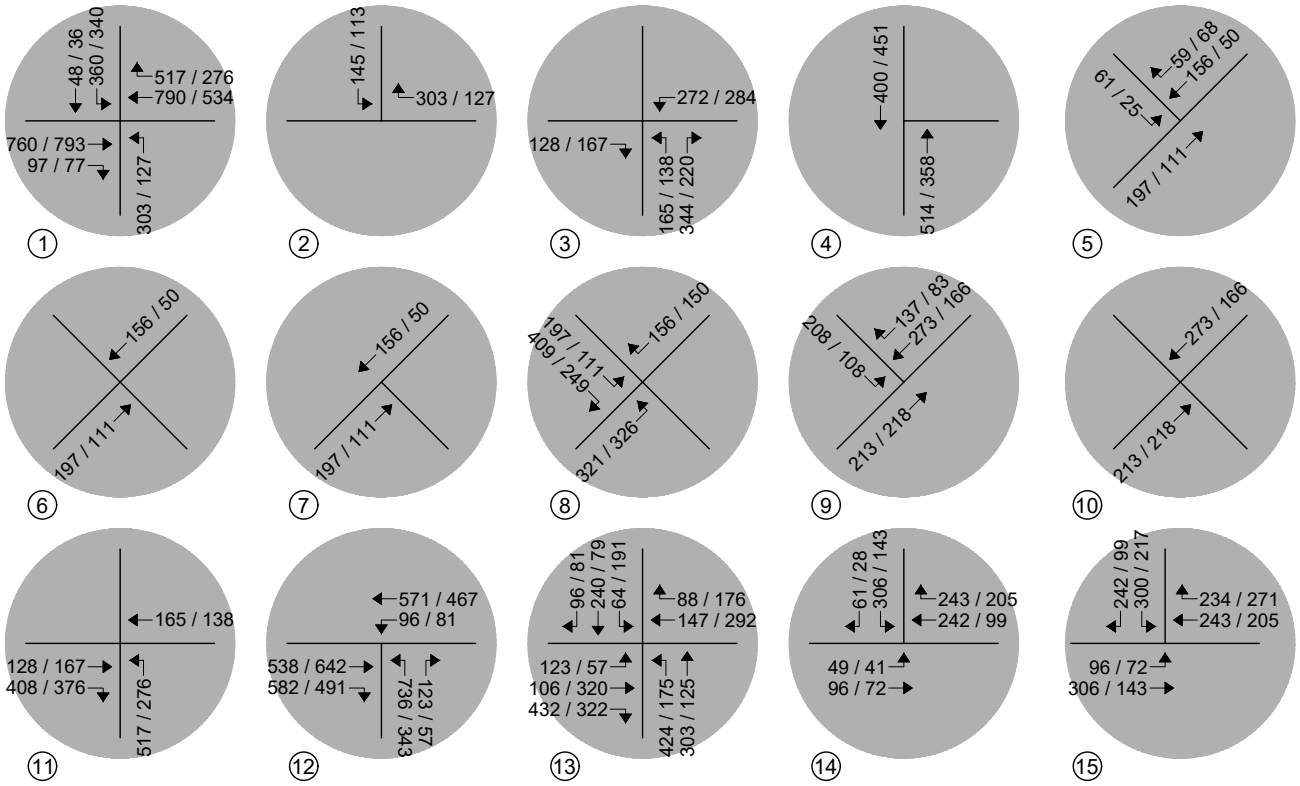


Figure 12
SITE DEVELOPMENT DISTRIBUTION - YEAR 2027
(%) : Overall



LEGEND

Study Intersection Volumes

Figure 13
SITE-GENERATED TRIPS - YEAR 2027
AM / PM Peak Hour

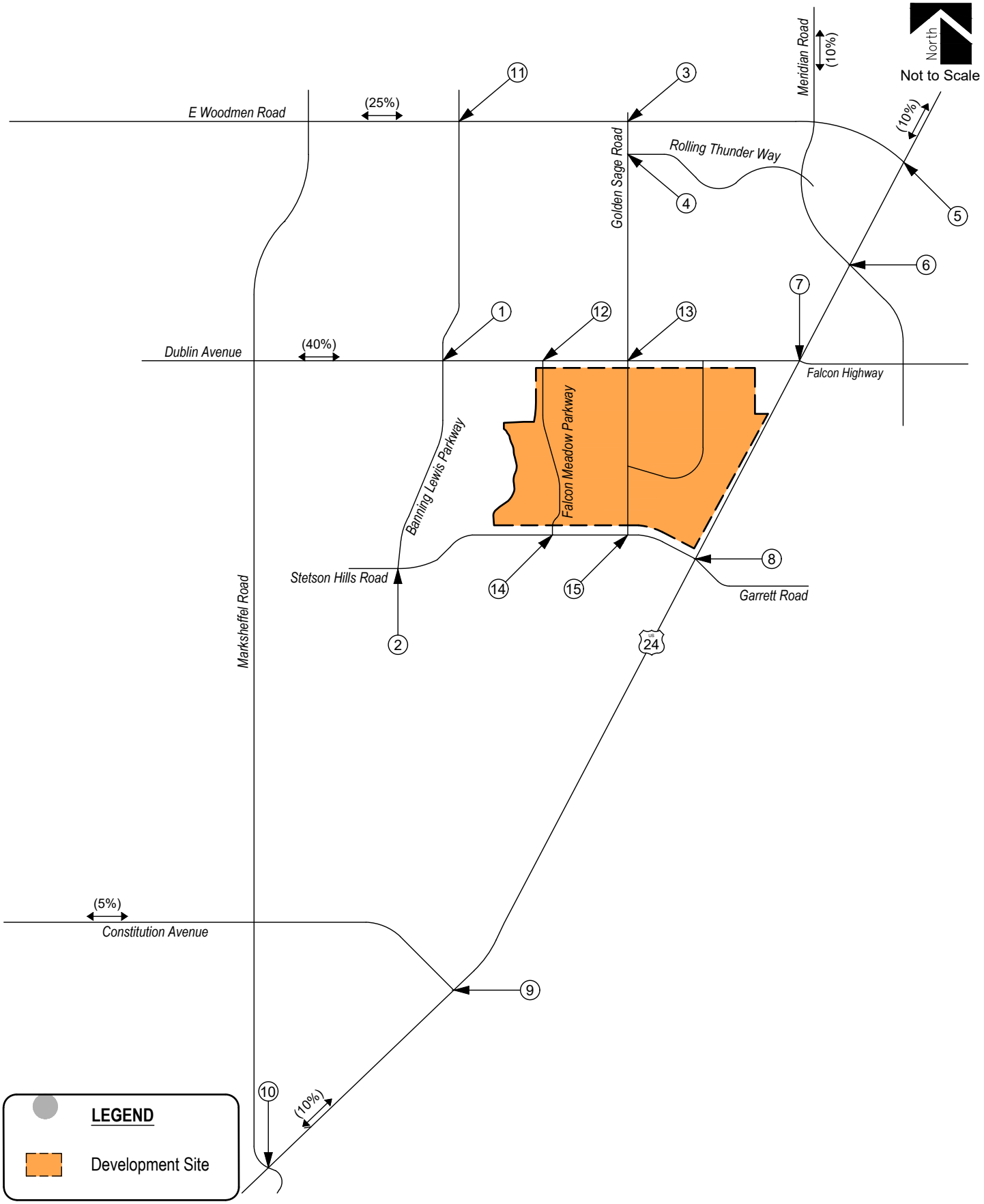
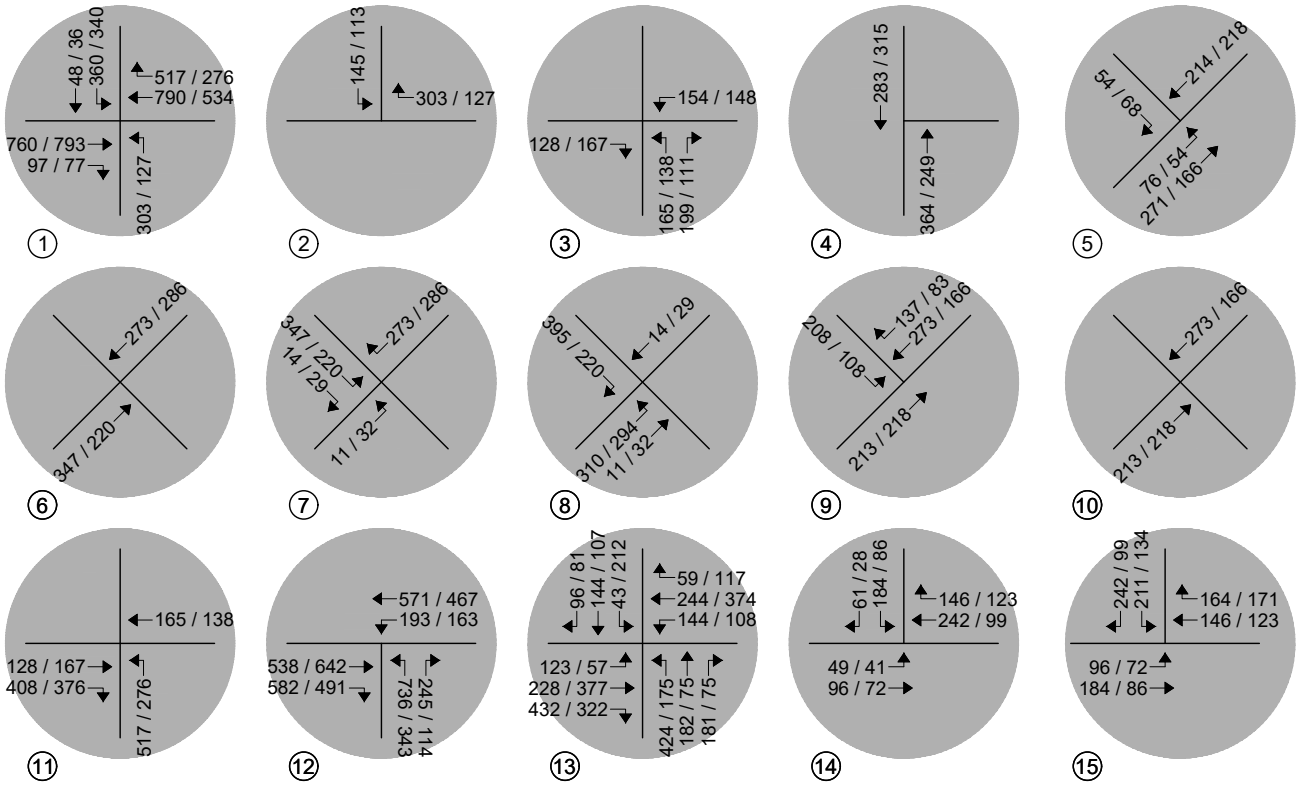


Figure 14
SITE DEVELOPMENT DISTRIBUTION - BUILD-OUT
(%) : Overall



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Study Intersection Volumes

Figure 15
SITE-GENERATED TRIPS - BUILD-OUT
AM / PM Peak Hour

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 2027 and 2045 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2027.

Pursuant to area roadway improvement discussions provided in Section III, Year 2027 total traffic conditions assume the signalization of the Intersection of Banning Lewis Parkway and Dublin Boulevard becomes signalized in order to remain consistent with Banning Lewis Ranch Villages A – D traffic study. Year 2045 total traffic conditions assumes the expansion of Stetson Hills Boulevard to four through lanes (two lanes in each direction) as well as the extension of Dublin Boulevard east to intersect with the existing intersection of U.S. Highway 24 and Falcon Highway. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency. It is important

Total Traffic Auxiliary Lane Analysis

Auxiliary lanes for site development accesses are to be based on the CDOT's State Highway Access Code[11] (SHAC).

Considering development build-out, an evaluation of auxiliary lane requirements, pursuant to Section 3.7(4)(a) of CDOT's SHAC, reveals that southbound right turn lanes along State Highway 24 at Stetson Hills Boulevard and Dublin Boulevard may be required since the development's projected peak hour right turn ingress volumes exceed CDOT's threshold of 10 vph.

Additionally, Section 3.7(4) of CDOT's SHAC, reveals that northbound left turn lanes along U.S. Highway 24 at Stetson Hills Boulevard and Dublin Boulevard may be required since the development's projected peak hour left turn ingress volumes exceed CDOT's threshold of 10 vehicles per day.

The study area intersections and projected short-term total ADT volumes are shown in Figure 16. Projected Year 2027 total intersection traffic volumes and geometry are shown in Figure 17 and Figure 18, respectively.

The study area intersections and projected long-term total ADT volumes are shown in Figure 19. Projected Year 2045 total intersection traffic volumes and geometry are shown in Figure 20 and Figure 21, respectively.

[11] State Highway Access Code, The Transportation Commission of Colorado, March 2002.

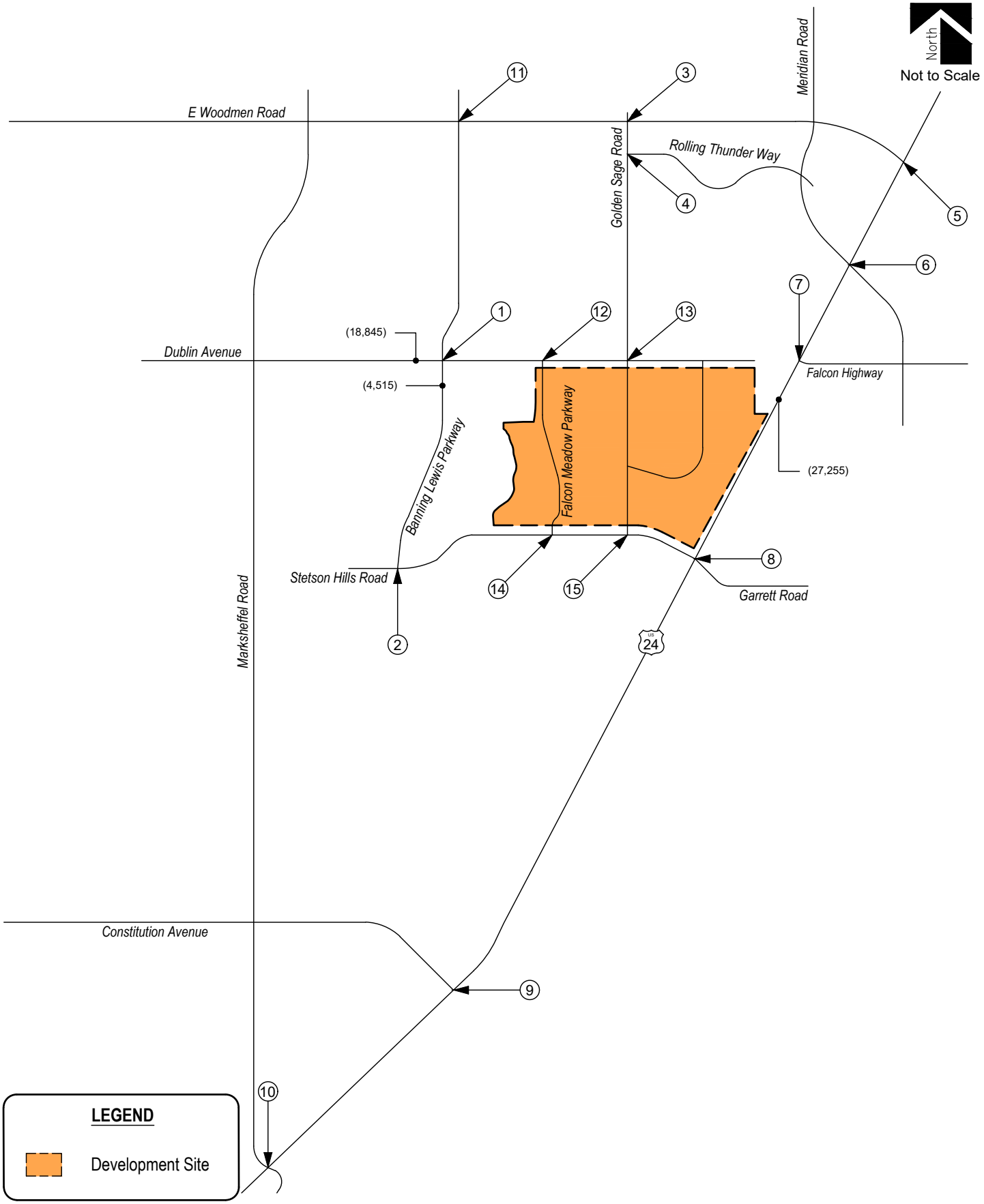
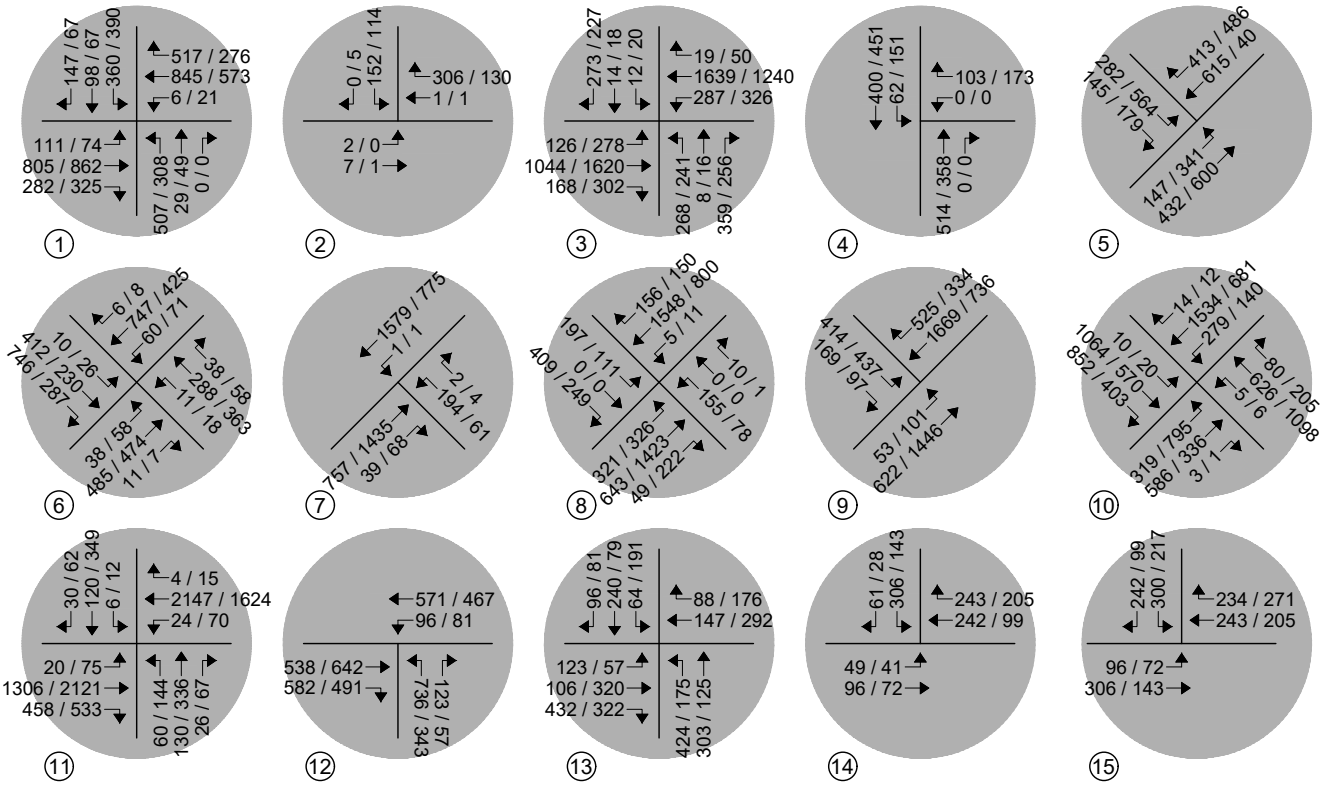
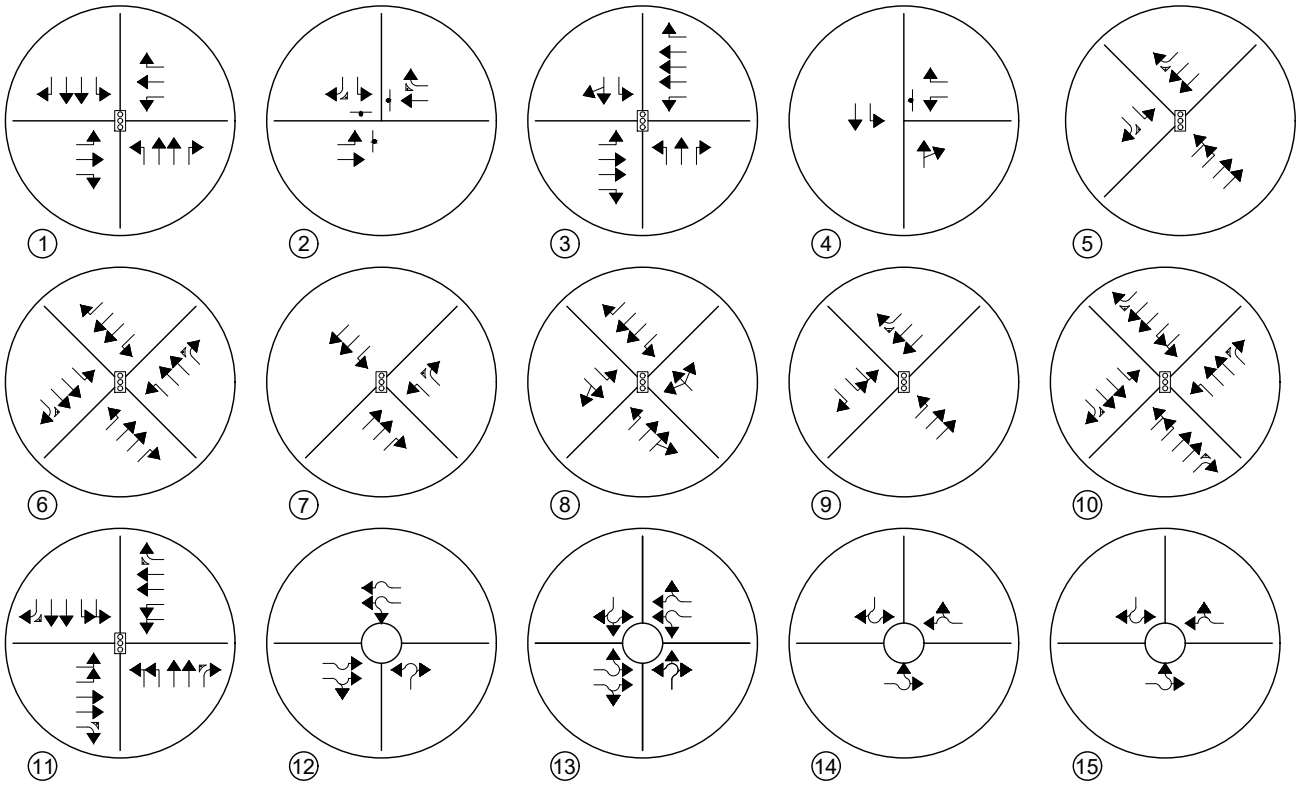


Figure 16
TOTAL ROADWAY NETWORK - YEAR 2027
(ADT) : Average Daily Traffic


North
Not to Scale
147 / 67
98 / 67
360 / 390
517 / 276
845 / 573
6 / 21
111 / 74
805 / 862
282 / 325
507 / 308
29 / 49
0 / 0
1
0 / 5
152 / 114
306 / 130
1 / 1
2 / 0
7 / 1
2
273 / 227
14 / 18
12 / 20
19 / 50
1639 / 1240
287 / 326
126 / 278
1044 / 1620
168 / 302
268 / 241
8 / 16
359 / 256
3
400 / 451
62 / 151
103 / 173
0 / 0
514 / 358
0 / 0
4
282 / 564
145 / 179
413 / 486
615 / 40
147 / 341
432 / 600
5
6 / 8
747 / 425
60 / 71
10 / 26
412 / 230
746 / 287
38 / 58
288 / 363
11 / 18
38 / 58
485 / 474
11 / 7
6
1579 / 775
1 / 1
2 / 4
194 / 61
757 / 1435
39 / 68
7
156 / 150
1548 / 800
5 / 11
197 / 111
0 / 0
409 / 249
10 / 1
0 / 0
155 / 78
321 / 326
643 / 1423
49 / 222
8
525 / 334
1669 / 736
414 / 437
169 / 97
53 / 101
622 / 1446
9
14 / 12
1534 / 681
279 / 140
10 / 20
1064 / 570
852 / 403
80 / 205
626 / 1098
5 / 6
319 / 795
586 / 336
3 / 1
10
30 / 62
120 / 349
6 / 12
4 / 15
2147 / 1624
24 / 70
20 / 75
1306 / 2121
458 / 533
60 / 144
130 / 336
26 / 67
11
571 / 467
96 / 81
538 / 642
582 / 491
736 / 343
123 / 57
12
96 / 81
240 / 79
64 / 191
88 / 176
147 / 292
123 / 57
106 / 320
432 / 322
424 / 175
303 / 125
13
61 / 28
306 / 143
243 / 205
242 / 99
49 / 41
96 / 72
14
242 / 99
300 / 217
234 / 271
243 / 205
96 / 72
306 / 143
15
LEGEND
Study Intersection Volumes



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Study Intersection
Lane Geometry

Figure 18
TOTAL INTERSECTION GEOMETRY - YEAR 2027
Intersection Geometry

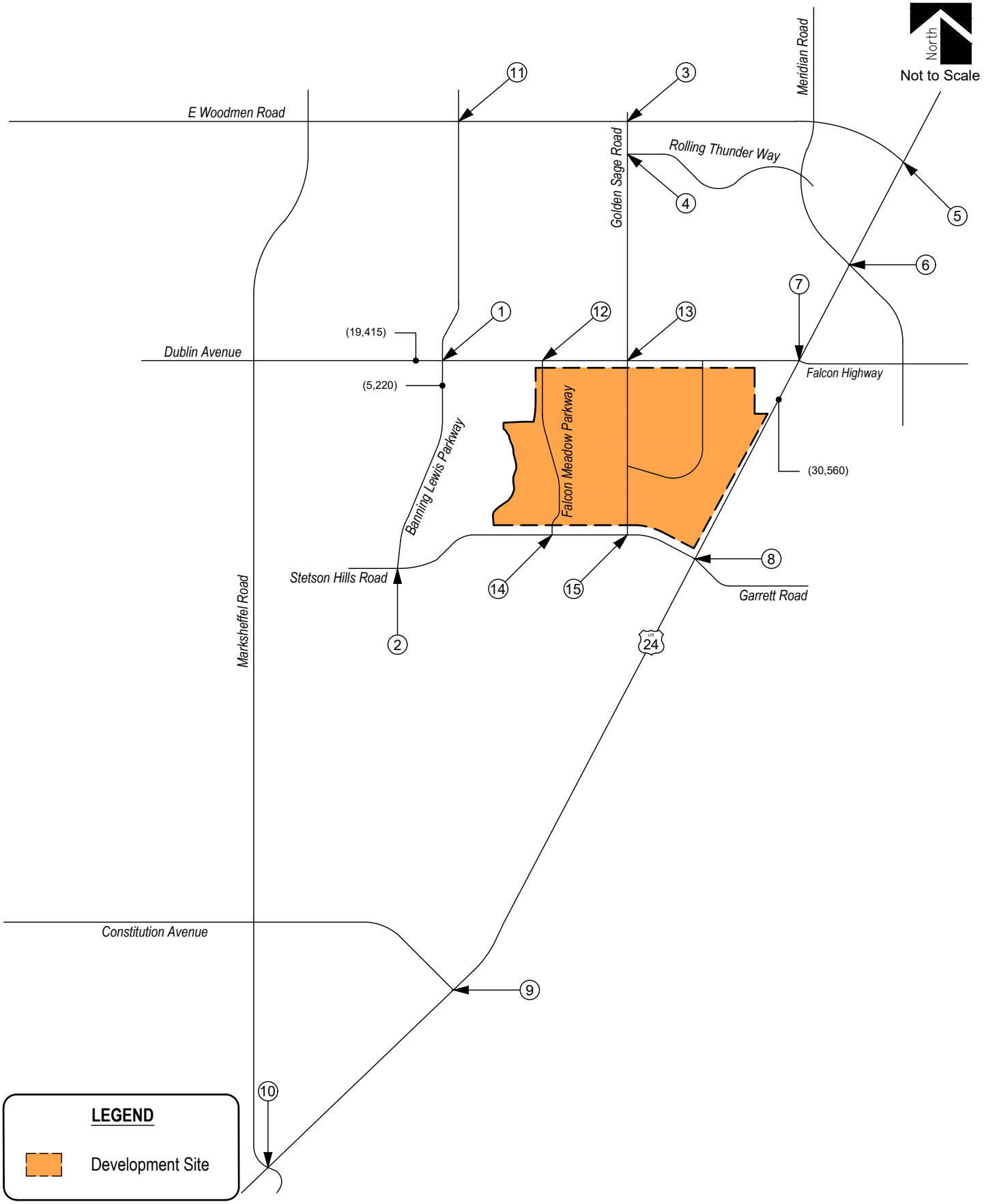
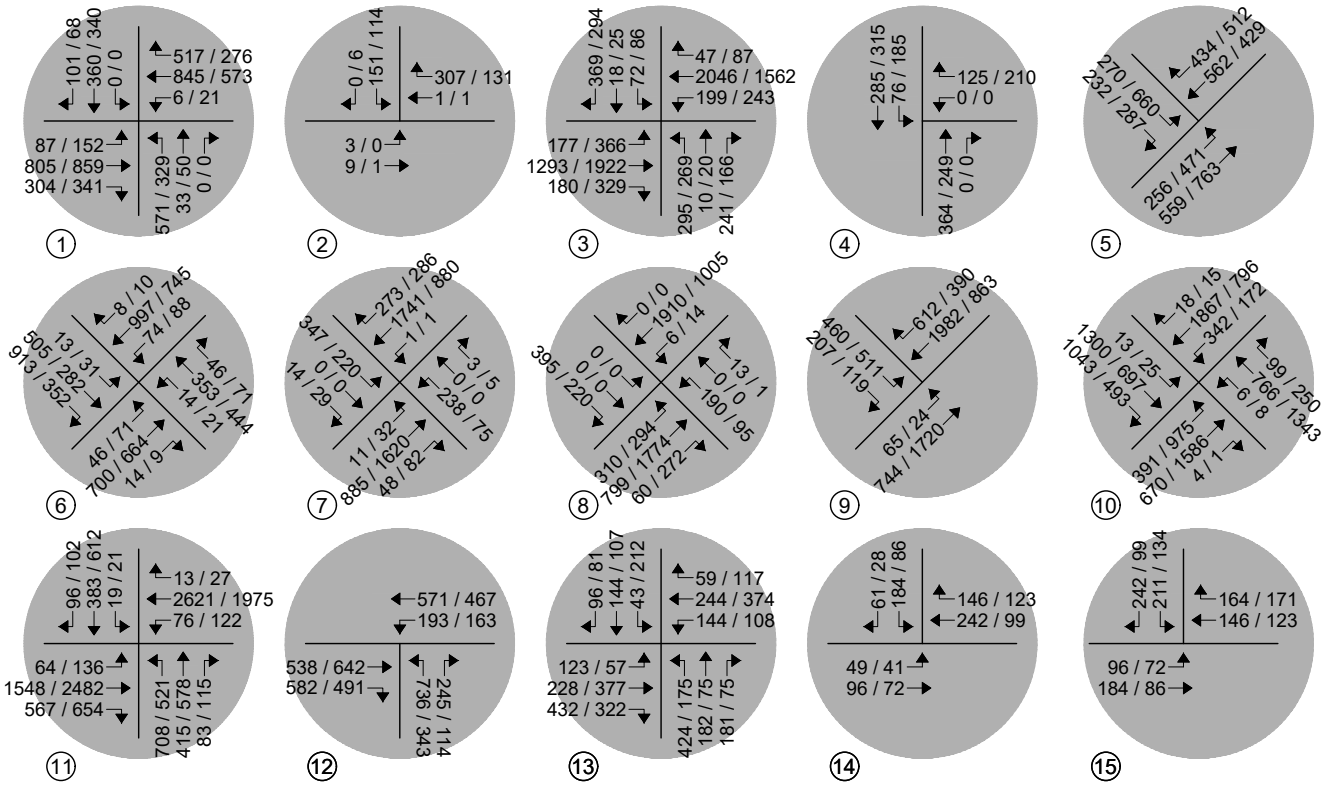


Figure 19
TOTAL ROADWAY NETWORK - YEAR 2044
(ADT) : Average Daily Traffic

North
Not to Scale



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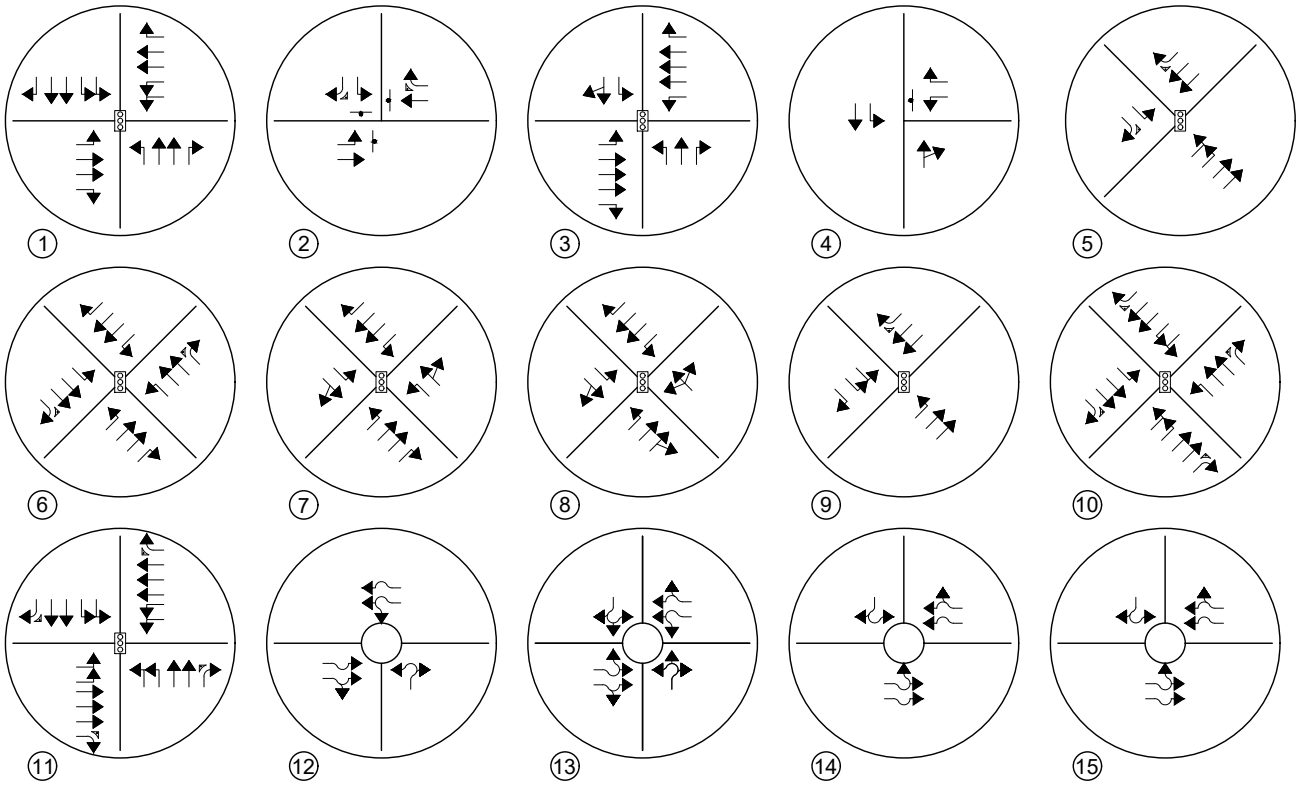
Study Intersection Volumes

Figure 20
TOTAL TRAFFIC VOLUMES - YEAR 2045
AM / PM Peak Hour

North

Not to Scale



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Study Intersection
Lane Geometry

Figure 21
TOTAL INTERSECTION GEOMETRY - YEAR 2045
Intersection Geometry

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 2027 and 2045 are summarized in Table 7 and Table 8, respectively.

The Signalized, Unsignalized, and Roundabout Intersection Analysis techniques, as published in the HCM, 7th Edition, by the Transportation Research Board and as incorporated into the SYNCHRO computer program, were used to analyze the study intersections for total traffic conditions. These nationally accepted techniques allow for the determination of intersection LOS based on the congestion, delay of each traffic movement, and based on the volume to capacity ratio and control delay for each approach.

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 2027

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
E Woodmen Road / Golden Sage Road (Signalized)	D (49.6)	E (70.0)
U.S. Highway 24 / E Woodmen Road (Signalized)	A (8.8)	A (10.0)
U.S. Highway 24 / Meridian Road (Signalized)	B (10.7)	B (12.8)
U.S. Highway 24 / Falcon Highway (Signalized)	B (12.3)	A (4.5)
U.S. Highway 24 / Garrett Road (Signalized)	D (37.2)	A (12.6)
U.S. Highway 24 / Constitution Avenue (Signalized)	C (24.2)	B (10.8)
U.S. Highway 24 / Marksheffel Road (Signalized)	D (47.7)	D (43.9)
Banning Lewis Parkway / E Woodmen Road (Signalized)	C (20.6)	C (30.0)
Dublin Boulevard / Banning Lewis Parkway (Signalized)	D (51.5)	D (36.9)

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

Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2027 – Cont.

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
Stetson Hills Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Left	A	A
Southbound Left	A	A
Southbound Right	A	A
Golden Sage Road / Rolling Thunder Way (Stop-Controlled)		
Wesbound Left	A	A
Westbound Right	B	B
Southbound Left	A	A
Falcon Meadow Parkway / Dublin Boulevard (Roundabout)		
Eastbound Through	A	A
Eastbound Through and Right	A	A
Westbound Left and Through	C	A
Westbound Through	B	A
Northbound Left, Through and Right	E	B
Golden Sage Road / Dublin Boulevard (Roundabout)		
Eastbound Left and Through	A	A
Eastbound Through and Right	A	A
Westbound Left and Through	A	A
Westbound Through and Right	A	A
Northbound Left, Through and Right	C	A
Southbound Left, Through and Right	B	A
Stetson Hills Boulevard / Falcon Meadow Parkway (Roundabout)		
Eastbound Left and Through	A	A
Westbound Through and Right	A	A
Westbound Left	A	A
Stetson Hills Boulevard / Golden Sage Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Westbound Through and Right	A	A
Westbound Left	A	B

Key: Stop-Controlled Intersection: Level of Service
Roundabout 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
E Woodmen Road / Golden Sage Road (Signalized)	E (71.9)	E (77.4)
E Woodmen Road / Golden Sage Road (Signalized)	*C (31.4)*	*C (25.2)*
U.S. Highway 24 / E Woodmen Road (Signalized)	A (7.3)	C (30.4)
U.S. Highway 24 / Meridian Road (Signalized)	B (13.2)	C (21.8)
U.S. Highway 24 / Falcon Highway (Signalized)	D (41.2)	B (17.3)
U.S. Highway 24 / Garrett Road (Signalized)	E (78.0)	B (12.2)
U.S. Highway 24 / Garrett Road (Signalized)	*D (44.6)*	*B (12.5)*
U.S. Highway 24 / Constitution Avenue (Signalized)	C (27.5)	B (17.4)
U.S. Highway 24 / Marksheffel Road (Signalized)	F (97.0)	F (103.2)
U.S. Highway 24 / Marksheffel Road (Signalized)	*D (37.3)*	*D (41.3)*
Banning Lewis Parkway / E Woodmen Road (Signalized)	F (87.4)	E (79.5)
Banning Lewis Parkway / E Woodmen Road (Signalized)	*D (49.3)*	*D (42.1)*
Dublin Boulevard / Banning Lewis Parkway (Signalized)	C (34.6)	C (24.4)

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

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

INTERSECTION LANE GROUPS	LEVEL OF SERVICE AM PEAK HOUR	 PM PEAK HOUR
Stetson Hills Boulevard / Banning Lewis Parkway (Stop-Controlled)		
Eastbound Left	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Left	A	A
Southbound Left	B	A
Southbound Right	A	A
Golden Sage Road / Rolling Thunder Way (Stop-Controlled)		
Wesbound Left	A	A
Westbound Right	B	B
Southbound Left	A	A
Falcon Meadow Parkway / Dublin Boulevard (Roundabout)		
Eastbound Through	A	A
Eastbound Through and Right	A	A
Westbound Left and Through	C	A
Westbound Through	C	A
Northbound Left, Through and Right	F	C
Golden Sage Road / Dublin Boulevard (Roundabout)		
Eastbound Left and Through	A	A
Eastbound Through and Right	A	A
Westbound Left and Through	B	A
Westbound Through and Right	A	A
Northbound Left, Through and Right	D	B
Southbound Left, Through and Right	B	B
Stetson Hills Boulevard / Falcon Meadow Parkway (Roundabout)		
Eastbound Left and Through	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Through and Right	A	A
Westbound Left	A	A
Stetson Hills Boulevard / Golden Sage Road (Stop-Controlled)		
Eastbound Left and Through	A	A
Eastbound Through	A	A
Westbound Through	A	A
Westbound Through and Right	A	A
Westbound Left	A	A

Key: Stop-Controlled Intersection: Level of Service
Roundabout 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 E Woodmen Road and Golden Sage Road is expected to provide overall operations at LOS E during the morning and afternoon peak traffic hours. The LOS E operations are attributed to the through traffic volume along E Woodmen Road, the eastbound left turning volumes projected along E Woodmen Road, and the southbound right turn volumes. Potential mitigation includes the provision of dual eastbound left turn lanes, and provision of a southbound right turn lane along Golden Sage Road. Additional capacity worksheets reflecting this mitigation are available in Appendix D.

The signalized intersection of U.S. Highway 24 and E Woodmen Road is projected to have overall operations at LOS A during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Meridian Road is anticipated to have overall operations at LOS B during the morning peak traffic hour and LOS C during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Falcon Highway is expected to provide overall operations at LOS D during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Garret Road is projected to have overall operations at LOS E during the morning peak traffic hour and LOS B during the afternoon peak traffic hour. The extended delay projected is attributed to the southwestbound through traffic volumes along U.S. Highway 24. Potential mitigation may include provision of an additional southwestbound through lane along U.S. Highway 24. It is noted that the difference in delays between peaks hours is considered a likely function of the overlap between peak school operations with the peak for adjacent street traffic. Whereas during the afternoon peak hour for adjacent street traffic, the majority of school related traffic is typically already dispersed for the day with most schools providing student release during non-peak hours. It is recommended that City and CDOT Staff monitor this intersection further as area develop continues to occur in order to determine when or if mitigation is appropriate. Additional capacity worksheets reflecting this mitigation are available in Appendix D.

The signalized intersection of U.S. Highway 24 and Constitution Avenue is expected to have overall operations at LOS C during the morning peak traffic hour and LOS B during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and Marksheffel Road is projected to have overall operations at LOS F during the morning and afternoon peak traffic hours. The extended delay projected is attributed to the high through volumes in each direction. As with background conditions, potential mitigation may include provision of an additional through lane in each direction. It is possible that the extension of Banning Lewis Parkway south to its connection with U.S. Highway 24 may provide some mitigation to the LOS F operations projected. It is recommended that City and CDOT Staff monitor this intersection further to determine when or if mitigation is appropriate.

The signalized intersection of E Woodmen Road and Banning Lewis Parkway is expected to provide overall operations at LOS F during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The LOS E and F operations are attributed to the through traffic volumes along E Woodmen Road and to the northbound left turn volumes along Banning Lewis Parkway. Considering the conceptual nature of the proposed development, potential mitigations for the LOS E and F operations may be subject to change as further extension of Banning Lewis Parkway is completed as well as the extension of Stetson Hills Boulevard west to Marksheffel Road. However, possible mitigation methods may include provision of a fourth through lane in each direction along E Woodmen Road as well as provision of a third northbound turn lane. It is recommended that City Staff monitor the study intersection to determine if or when any mitigation options are needed. Additional capacity worksheets reflecting this mitigation are available in Appendix D.

The signalized intersection of Dublin Boulevard and Banning Lewis Parkway is expected to have overall operations at LOS C during the morning and afternoon peak traffic hours.

The stop-controlled intersection of Stetson Hills Boulevard and Banning Lewis Parkway has turning movement operations at LOS B or better during the morning peak traffic hour and LOS A during the afternoon peak traffic hour.

The stop-controlled intersection of Golden Sage Road and Rolling Thunder Way has turning movement operations at LOS B or better during the morning and afternoon peak traffic hours.

The roundabout-controlled intersection of Falcon Meadow Parkway has turning movement operations at LOS C or better during the morning and afternoon peak traffic hours. Exceptions include the northbound turning movement which has turning movement operations at LOS F during the morning peak traffic hour. It is likely that the extension of Stetson Hills Boulevard east to Marksheffel Road and the extension of Banning Lewis Parkway south to U.S. Highway 24 will likely provide mitigation to the LOS F operation projected. It is recommended that City Staff monitor this study intersection to determine if or when specific mitigation measures are needed.

The roundabout-controlled intersection of Golden Sage Road and Dublin Boulevard has turning movement operations at LOS D or better during the morning peak traffic hour and LOS B or better during the afternoon peak traffic hour.

The roundabout controlled intersection of Stetson Hills Boulevard and Falcon Meadow Parkway is projected to have turning movement operations at LOS A during the morning and afternoon peak traffic hours.

The roundabout controlled intersection of Stetson Hills Boulevard and Falcon Meadow Parkway is projected to have turning movement operations at LOS A during the morning and afternoon peak traffic hours.

Recommendations

Roadway and intersection improvement recommendations were assessed pursuant to roadway descriptions discussed in Section I, projected peak hour traffic volumes, level of service results, projected 95th percentile queue lengths, and per requirements defined within the City's Traffic Criteria Manual.

Considering the conceptual nature of the development areas proposed, and the conceptual nature of specific public improvements (such as the extension of Stetson Hills Boulevard east to Marksheffel Road and the extension of Banning Lewis Parkway south to U.S. Highway 24) intersection improvements identified in this analysis are subject to change. Currently recommended public improvements are primarily anticipated to include auxiliary lanes at site accesses, frontage road improvements and the signalization of Banning Lewis Parkway and Dublin Boulevard to remain consistent with the Banning Lewis Ranch Villages A-D traffic study.

Specific recommended roadway and intersection improvements for Year 2027 and Year 2045 total traffic conditions are included for reference in Appendix E.

As actual land uses, densities, or site plans within Banning Lewis Ranch Village C become defined over time, it is expected that more specific traffic analyses or studies will be needed to help assess if or when certain transportation improvements are needed to mitigate potential traffic impacts.

VII. Conclusion

This traffic impact study addressed the capacity, geometric, and control requirements associated with the development entitled Banning Lewis Ranch Village C. This proposed mixed-use development is assumed to consist of approximately 57 acres of public park, 290,000 square feet of shopping center, and 5,000 square feet of fire and rescue station as well as approximately 2,700 single family detached homes, an elementary school supporting approximately 1,370 students, and high school supporting approximately 1,980 students.

The study area to examined in this analysis encompassed the Banning Lewis Parkway intersections with Dublin Boulevard and Stetson Hills Boulevard, the E Woodmen Road intersection with Golden Sage Road, the Golden Sage Road intersection with Rolling Thunder Way, the U.S. Highway 24 intersection with Garrett Road, and includes proposed site accesses.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2027 and Year 2045 background traffic conditions, and Year 2027 and Year 2045 total traffic conditions.

Analysis of existing traffic conditions indicates that the signalized intersections within the study area have operations at LOS D or better during the morning and afternoon peak traffic hours. The stop-controlled intersections within the study area have turning movement operations at LOS A during the morning and afternoon peak traffic hours.

Without the proposed development, Year 2027 background operational analysis shows that the signalized intersections within the study area have overall operations at LOS D or better during the morning and afternoon peak traffic hours. The stop-controlled intersections within the study area continue to anticipate overall operations at LOS C or better during the morning and afternoon peak traffic hours. Exceptions include the eastbound left turning movement at the intersection of Dublin Boulevard and Banning Lewis Parkway, which operates at LOS E during the morning peak traffic hour.

By Year 2045 and without the proposed development, the signalized intersections within the study area are expected to operate at LOS D or better during the morning and afternoon peak traffic hour. Exceptions include the U.S. Highway 24 and Marksheffel Road intersection, which operates at LOS E during the morning and afternoon peak traffic hours, and the Banning Lewis Parkway and E Woodmen Road intersection which operates at LOS E during the afternoon peak traffic hour. The stop-controlled intersection of Stetson Hills Boulevard and Banning Lewis Parkway is projected to operate at LOS A during morning and afternoon peak traffic hours.

Analysis of future traffic conditions indicate that the addition of site-generated traffic is expected to cause some impacts to traffic operations for the existing and surrounding roadway system. However, it is anticipated that development traffic can be accommodated and these impacts mitigated upon implementation of the various applicable roadway and intersection control improvements assumed within this analysis. Proposed site accesses have long-term operations at LOS C or better during peak traffic periods and upon build-out. Exceptions include the U.S. Highway 24 intersections with Stetson Hills Boulevard, which operate at LOS E during the morning peak traffic hour, and the Falcon Meadow Parkway and Dublin Boulevard intersection, which has northbound turning movements at LOS F during the morning peak traffic hour. It is recommended as actual land uses and densities become defined within the overall Banning Lewis Ranch Village C that intersection operational analysis will need to be updated to help assess if transportation improvements are needed to mitigate potential traffic impacts.

It is anticipated that proposed public roadways accessing U.S. Highway 24 will require new CDOT access permits and are anticipated to be coordinated between the City and CDOT as may be required.

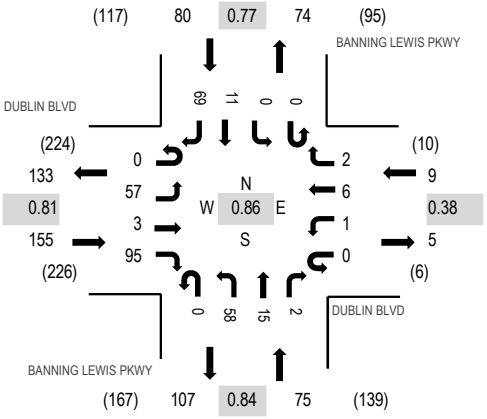
APPENDIX A

Traffic Count Data
Signal Timing Information

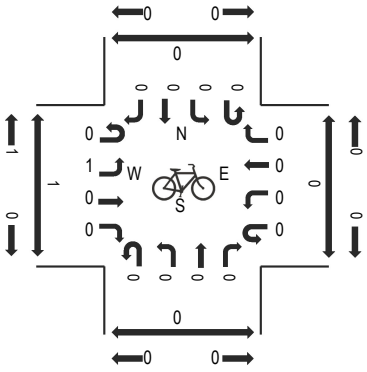
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 BANNING LEWIS PKWY & DUBLIN BLVD AM
Date: Wednesday, August 7, 2024
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

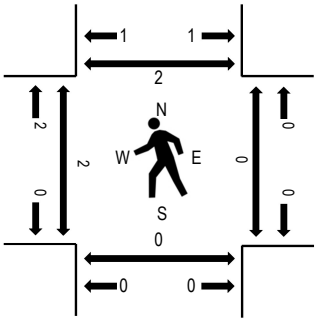
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

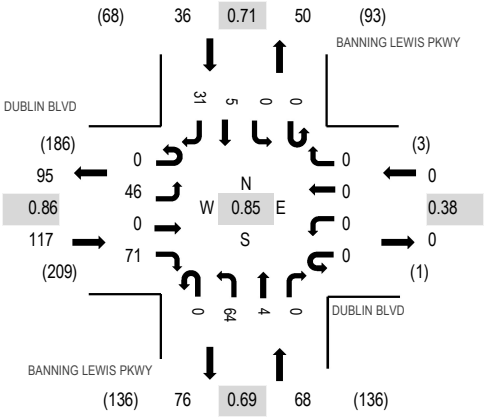
Traffic Counts - Motorized Vehicles

Interval Start Time	DUBLIN BLVD Eastbound				DUBLIN BLVD Westbound				BANNING LEWIS PKWY Northbound				BANNING LEWIS PKWY 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	1	15	0	0	0	0	0	21	5	0	0	0	0	12	57	312	1	1	1	0
7:15 AM	0	18	1	15	0	0	0	1	0	16	4	0	0	0	4	20	79	319	1	0	0	0
7:30 AM	0	20	1	20	0	0	2	0	0	15	8	1	0	0	3	23	93	283	0	0	0	2
7:45 AM	0	14	1	33	0	0	0	0	0	13	3	1	0	0	4	14	83	218	0	0	0	0
8:00 AM	0	5	0	27	0	1	4	1	0	14	0	0	0	0	0	12	64	180	1	0	0	0
8:15 AM	0	5	0	16	0	0	1	0	0	12	0	0	0	0	0	9	43		0	0	0	0
8:30 AM	0	1	0	12	0	0	0	0	0	9	1	0	0	0	1	4	28		1	0	0	0
8:45 AM	0	4	0	14	0	0	0	0	0	14	2	0	0	0	2	9	45		0	0	0	0
Count Total	0	70	4	152	0	1	7	2	0	114	23	2	0	0	14	103	492		4	1	1	2
Peak Hour	0	57	3	95	0	1	6	2	0	58	15	2	0	0	11	69	319		2	0	0	2

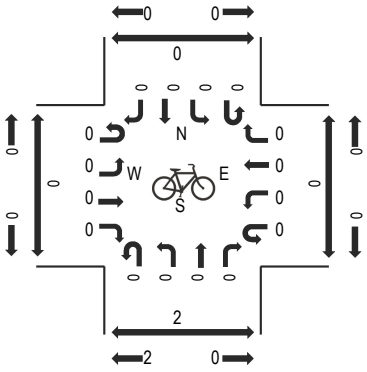
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 BANNING LEWIS PKWY & DUBLIN BLVD PM
Date: Wednesday, August 7, 2024
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

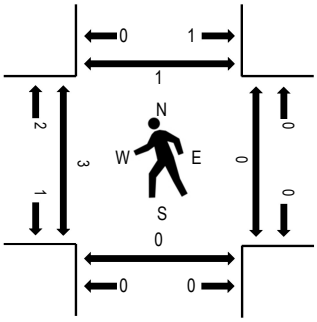
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

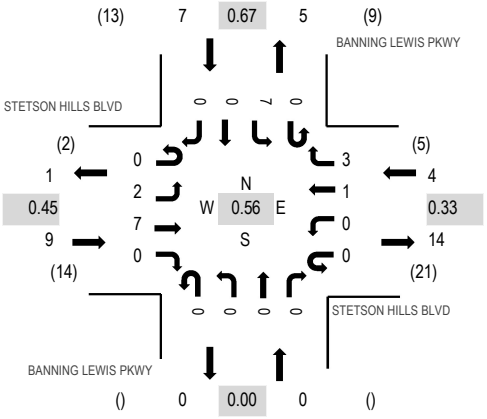
Traffic Counts - Motorized Vehicles

Interval Start Time	DUBLIN BLVD Eastbound				DUBLIN BLVD Westbound				BANNING LEWIS PKWY Northbound				BANNING LEWIS PKWY 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	8	0	14	0	1	1	0	0	13	1	0	0	0	1	7	46	207	1	0	0	0
4:15 PM	0	9	0	11	0	0	0	1	0	18	4	1	0	0	0	9	53	206	0	0	0	0
4:30 PM	0	9	0	17	0	0	0	0	0	12	1	0	0	0	0	9	48	218	1	0	0	0
4:45 PM	0	15	0	19	0	0	0	0	0	12	0	0	0	0	0	14	60	221	0	0	0	0
5:00 PM	0	8	0	16	0	0	0	0	0	12	2	0	0	0	2	5	45	209	0	0	0	0
5:15 PM	0	11	0	19	0	0	0	0	0	26	1	0	0	0	3	5	65		1	0	0	0
5:30 PM	0	12	0	17	0	0	0	0	0	14	1	0	0	0	0	7	51		2	0	0	1
5:45 PM	1	9	0	14	0	0	0	0	0	17	1	0	0	0	2	4	48		0	0	0	0
Count Total	1	81	0	127	0	1	1	1	0	124	11	1	0	0	8	60	416		5	0	0	1
Peak Hour	0	46	0	71	0	0	0	0	0	64	4	0	0	0	5	31	221		3	0	0	1

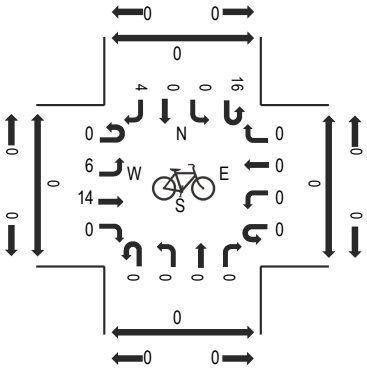
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 BANNING LEWIS PKWY & STETSON HILLS BLVD AM
Date: Wednesday, August 7, 2024
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

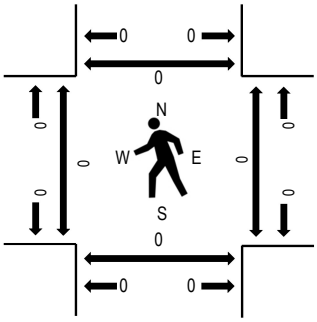
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

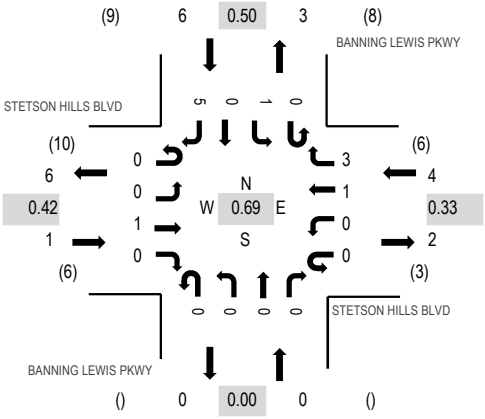
Traffic Counts - Motorized Vehicles

Interval Start Time	STETSON HILLS BLVD Eastbound				STETSON HILLS BLVD Westbound				BANNING LEWIS PKWY Northbound				BANNING LEWIS PKWY 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	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	17	0	0	0	0
7:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	3	0	0	5	16	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	20	0	0	0	0
7:45 AM	0	0	5	0	0	0	0	0	0	0	0	0	0	2	0	0	7	19	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	15	0	0	0	0
8:15 AM	0	0	2	0	0	0	1	2	0	0	0	0	0	4	0	0	9		0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		0	0	1	0
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3		0	0	0	0
Count Total	0	5	9	0	0	0	2	3	0	0	0	0	1	12	0	0	32		0	0	1	0
Peak Hour	0	2	7	0	0	0	1	3	0	0	0	0	0	7	0	0	20		0	0	0	0

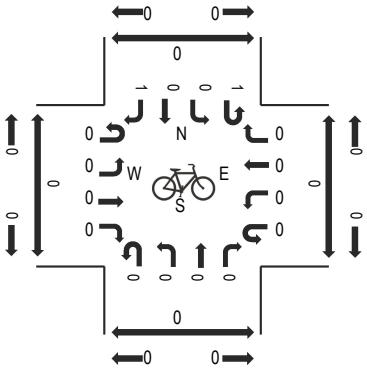
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 BANNING LEWIS PKWY & STETSON HILLS BLVD PM
Date: Wednesday, August 7, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

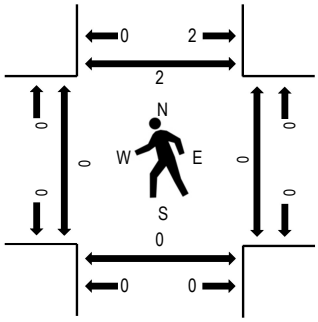
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

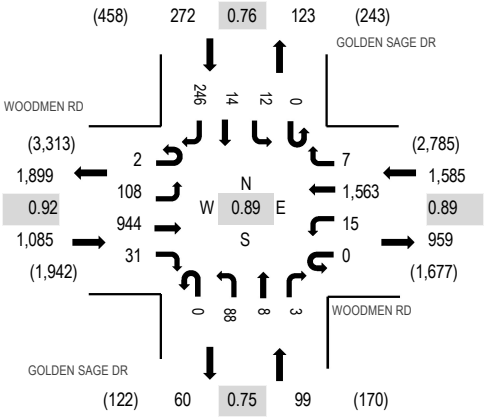
Traffic Counts - Motorized Vehicles

Interval Start Time	STETSON HILLS BLVD Eastbound				STETSON HILLS BLVD Westbound				BANNING LEWIS PKWY Northbound				BANNING LEWIS PKWY 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	3	0	0	0	0	1	0	0	0	0	0	0	0	0	2	6	10	0	1	0	1
4:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	8	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	11	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	4		0	0	0	2
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2		0	0	0	0
Count Total	0	4	2	0	0	0	2	4	0	0	0	0	0	1	0	8	21		0	1	1	5
Peak Hour	0	0	1	0	0	0	1	3	0	0	0	0	0	1	0	5	11		0	0	0	2

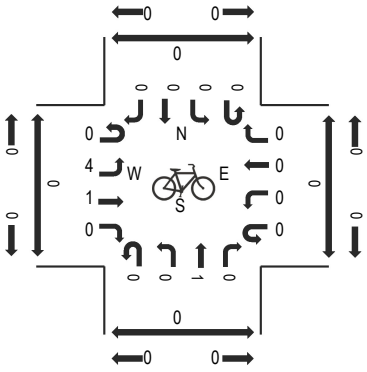
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 GOLDEN SAGE DR & WOODMEN RD AM
Date: Wednesday, August 7, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

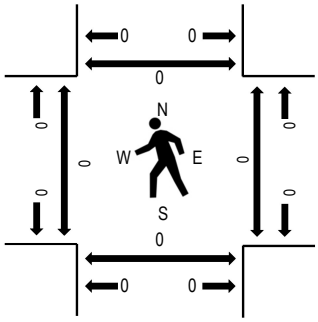
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

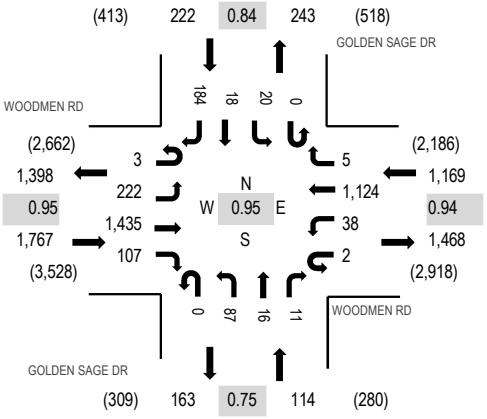
Traffic Counts - Motorized Vehicles

Interval Start Time	WOODMEN RD Eastbound				WOODMEN RD Westbound				GOLDEN SAGE DR Northbound				GOLDEN SAGE DR 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	23	212	2	0	0	381	3	0	23	2	1	0	0	0	47	694	3,041	0	0	0	0
7:15 AM	1	25	239	8	0	6	397	3	0	27	4	2	0	6	5	63	786	2,901	0	0	0	0
7:30 AM	1	25	258	10	0	2	444	1	0	21	0	0	0	5	7	77	851	2,728	0	0	0	0
7:45 AM	0	35	235	11	0	7	341	0	0	17	2	0	0	1	2	59	710	2,454	0	0	0	0
8:00 AM	3	34	180	8	0	2	267	1	0	11	1	0	0	2	3	42	554	2,314	0	0	0	0
8:15 AM	1	30	166	11	0	5	332	1	0	20	0	1	0	5	0	41	613		0	0	0	0
8:30 AM	0	18	165	7	0	4	300	3	0	18	3	1	0	3	2	53	577		0	0	0	0
8:45 AM	2	28	191	13	0	4	280	1	0	15	0	1	0	3	3	29	570		0	0	0	0
Count Total	8	218	1,646	70	0	30	2,742	13	0	152	12	6	0	25	22	411	5,355		0	0	0	0
Peak Hour	2	108	944	31	0	15	1,563	7	0	88	8	3	0	12	14	246	3,041		0	0	0	0

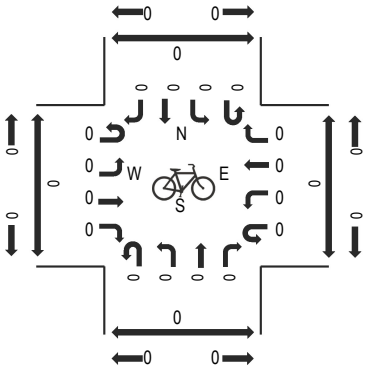
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 GOLDEN SAGE DR & WOODMEN RD PM
Date: Wednesday, August 7, 2024
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

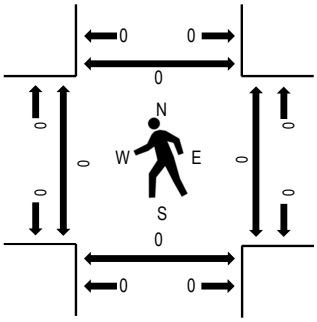
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

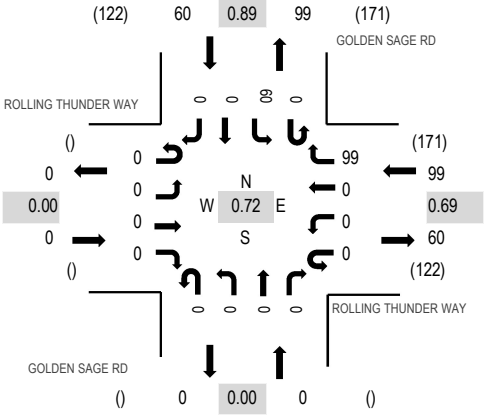
Traffic Counts - Motorized Vehicles

Interval Start Time	WOODMEN RD Eastbound				WOODMEN RD Westbound				GOLDEN SAGE DR Northbound				GOLDEN SAGE DR 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	52	341	44	2	19	289	2	0	12	3	2	0	8	6	52	832	3,272	0	0	0	0
4:15 PM	1	61	339	22	0	11	299	1	0	36	7	5	0	2	5	38	827	3,231	0	0	0	0
4:30 PM	2	57	396	25	0	3	281	1	0	29	3	1	0	4	3	53	858	3,191	0	0	0	0
4:45 PM	0	52	359	16	0	5	255	1	0	10	3	3	0	6	4	41	755	3,161	0	0	0	0
5:00 PM	1	54	367	14	1	4	273	3	0	22	5	3	0	1	3	40	791	3,135	0	0	0	0
5:15 PM	0	71	366	41	0	9	206	1	0	38	6	11	0	2	5	31	787		0	0	0	0
5:30 PM	0	69	383	25	0	8	230	1	0	36	4	8	0	2	4	58	828		0	0	0	0
5:45 PM	0	52	297	21	1	8	269	3	0	19	6	8	0	0	4	41	729		0	0	0	0
Count Total	4	468	2,848	208	4	67	2,102	13	0	202	37	41	0	25	34	354	6,407		0	0	0	0
Peak Hour	3	222	1,435	107	2	38	1,124	5	0	87	16	11	0	20	18	184	3,272		0	0	0	0

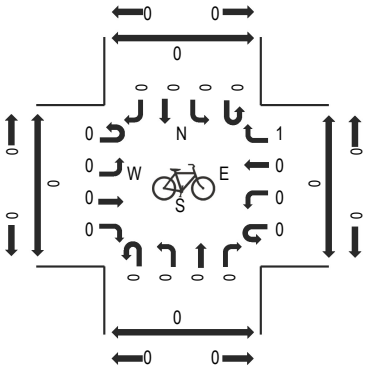
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 GOLDEN SAGE RD & ROLLING THUNDER WAY AM
Date: Wednesday, August 7, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

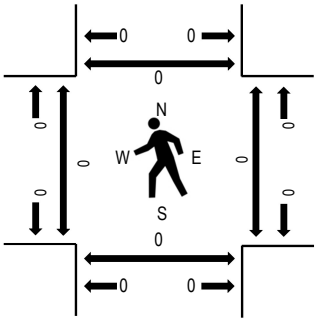
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

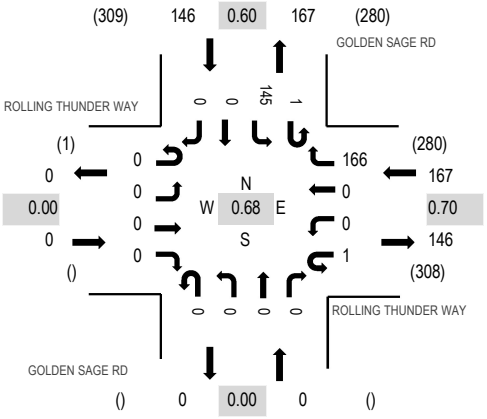
Traffic Counts - Motorized Vehicles

Interval Start Time	ROLLING THUNDER WAY Eastbound				ROLLING THUNDER WAY Westbound				GOLDEN SAGE RD Northbound				GOLDEN SAGE 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	0	0	0	0	0	27	0	0	0	0	0	2	0	0	29	159	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	36	0	0	0	0	0	19	0	0	55	157	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	19	0	0	0	0	0	19	0	0	38	136	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	17	0	0	0	0	0	20	0	0	37	133	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	14	0	0	0	0	0	13	0	0	27	134	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	19	0	0	0	0	0	15	0	0	34		0	0	0	0
8:30 AM	0	0	0	0	0	0	0	21	0	0	0	0	0	14	0	0	35		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	18	0	0	0	0	0	20	0	0	38		0	0	0	0
Count Total	0	0	0	0	0	0	0	171	0	0	0	0	0	122	0	0	293		0	0	0	0
Peak Hour	0	0	0	0	0	0	0	99	0	0	0	0	0	60	0	0	159		0	0	0	0

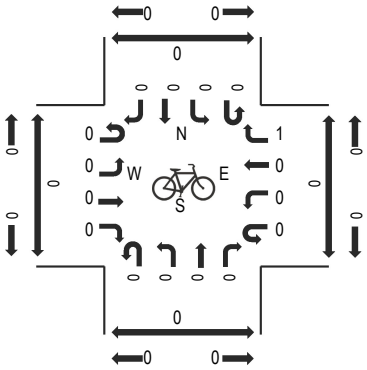
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 GOLDEN SAGE RD & ROLLING THUNDER WAY PM
Date: Wednesday, August 7, 2024
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

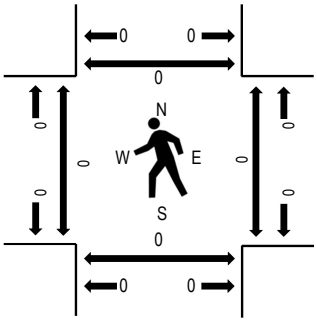
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

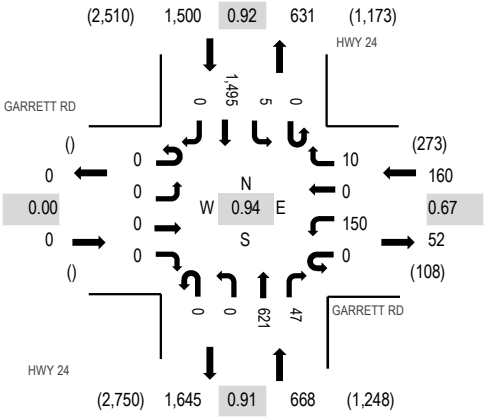
Traffic Counts - Motorized Vehicles

Interval Start Time	ROLLING THUNDER WAY Eastbound				ROLLING THUNDER WAY Westbound				GOLDEN SAGE RD Northbound				GOLDEN SAGE 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	0	0	0	0	0	21	0	0	0	0	0	67	0	1	89	276	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	44	0	0	0	0	0	39	0	0	83	242	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	32	0	0	0	0	0	30	0	0	62	274	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	16	0	0	0	0	0	26	0	0	42	294	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	34	0	0	0	0	0	21	0	0	55	313	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	60	0	0	0	0	0	55	0	0	115		0	0	0	0
5:30 PM	0	0	0	0	1	0	0	44	0	0	0	0	0	37	0	0	82		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	28	0	0	0	0	1	32	0	0	61		0	0	0	0
Count Total	0	0	0	0	1	0	0	279	0	0	0	0	1	307	0	1	589		0	0	0	0
Peak Hour	0	0	0	0	1	0	0	166	0	0	0	0	1	145	0	0	313		0	0	0	0

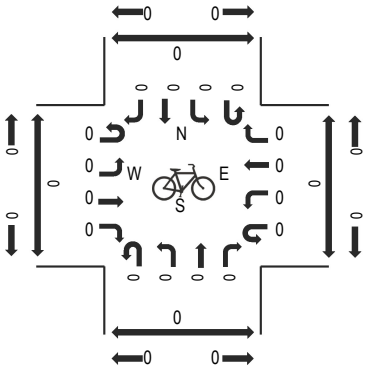
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 HWY 24 & GARRETT RD AM
Date: Wednesday, August 7, 2024
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

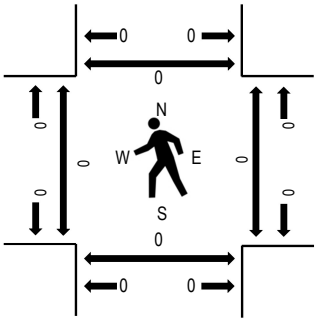
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

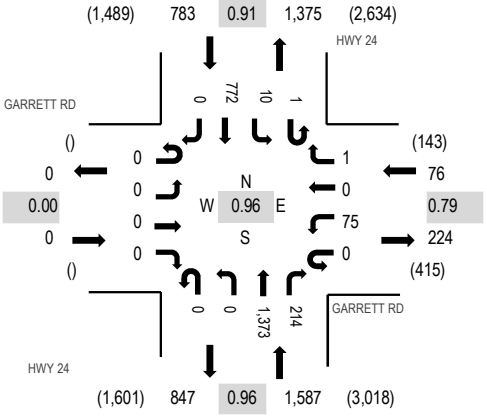
Traffic Counts - Motorized Vehicles

Interval Start Time	GARRETT RD Eastbound				GARRETT RD Westbound				HWY 24 Northbound				HWY 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	0	0	0	0	0	57	0	3	0	0	127	10	0	0	369	0	566	2,328	0	0	0	0
7:15 AM	0	0	0	0	0	25	0	0	0	0	174	11	0	0	409	0	619	2,194	0	0	0	0
7:30 AM	0	0	0	0	0	43	0	3	0	0	162	11	0	1	385	0	605	2,055	0	0	0	0
7:45 AM	0	0	0	0	0	25	0	4	0	0	158	15	0	4	332	0	538	1,861	0	0	0	0
8:00 AM	0	0	0	0	0	30	0	6	0	0	127	12	0	3	254	0	432	1,703	0	0	0	0
8:15 AM	0	0	0	0	0	23	0	4	0	0	126	10	0	1	316	0	480		0	0	0	0
8:30 AM	0	0	0	0	0	20	0	1	0	0	148	10	0	1	231	0	411		0	0	0	0
8:45 AM	0	0	0	0	0	29	0	0	0	0	130	17	0	2	202	0	380		0	0	0	0
Count Total	0	0	0	0	0	252	0	21	0	0	1,152	96	0	12	2,498	0	4,031		0	0	0	0
Peak Hour	0	0	0	0	0	150	0	10	0	0	621	47	0	5	1,495	0	2,328		0	0	0	0

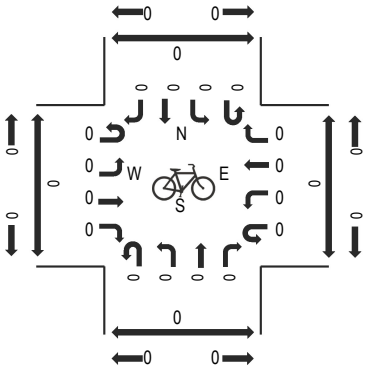
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 HWY 24 & GARRETT RD PM
Date: Wednesday, August 7, 2024
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

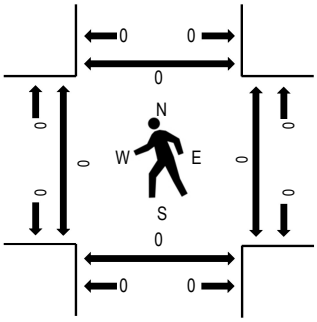
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	GARRETT RD Eastbound				GARRETT RD Westbound				HWY 24 Northbound				HWY 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	0	0	0	0	21	0	1	0	0	303	34	0	4	176	0	539	2,350	0	0	0	0
4:15 PM	0	0	0	0	0	24	0	0	0	0	362	51	0	2	186	0	625	2,446	0	0	0	0
4:30 PM	0	0	0	0	0	18	0	0	0	0	333	54	0	2	189	0	596	2,423	0	0	0	0
4:45 PM	0	0	0	0	0	10	0	0	0	0	333	59	0	3	185	0	590	2,420	0	0	0	0
5:00 PM	0	0	0	0	0	23	0	1	0	0	345	50	1	3	212	0	635	2,300	0	0	0	0
5:15 PM	0	0	0	0	0	11	0	2	0	0	342	56	0	1	190	0	602		0	0	0	0
5:30 PM	0	0	0	0	0	18	0	2	0	0	324	61	0	3	185	0	593		0	0	0	0
5:45 PM	0	0	0	0	0	9	0	3	0	0	282	29	0	3	144	0	470		0	0	0	0
Count Total	0	0	0	0	0	134	0	9	0	0	2,624	394	1	21	1,467	0	4,650		0	0	0	0
Peak Hour	0	0	0	0	0	75	0	1	0	0	1,373	214	1	10	772	0	2,446		0	0	0	0

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

Site Code: 6
Station ID: 6
DUBLIN BLVD W.O. BANNING LEWIS PKWY

Start Time	07-Aug-24 Wed	EB	WB							Total
12:00 AM		3	1							4
01:00		1	5							6
02:00		0	0							0
03:00		0	5							5
04:00		0	3							3
05:00		5	22							27
06:00		50	92							142
07:00		**142**	**136**							**278**
08:00		84	88							172
09:00		59	77							136
10:00		59	100							159
11:00		74	59							133
12:00 PM		70	76							146
01:00		74	61							135
02:00		77	75							152
03:00		**124**	**101**							**225**
04:00		102	95							197
05:00		107	91							198
06:00		79	82							161
07:00		57	37							94
08:00		50	24							74
09:00		18	13							31
10:00		15	5							20
11:00		7	4							11
Total		1257	1252							2509
Percent		50.1%	49.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	142	136	-	-	-	-	-	-	278
PM Peak	-	15:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	124	101	-	-	-	-	-	-	225
Grand Total		1257	1252							2509
Percent		50.1%	49.9%							
ADT		ADT 2,509		AADT 2,509						

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

Site Code: 7
Station ID: 7
BANNING LEWIS S.O. DUBLIN BLVD

Start Time	07-Aug-24 Wed	NB	SB							Total
12:00 AM		0	2							2
01:00		3	1							4
02:00		0	0							0
03:00		3	0							3
04:00		2	1							3
05:00		11	3							14
06:00		49	37							86
07:00		**87**	**94**							**181**
08:00		52	73							125
09:00		66	52							118
10:00		77	50							127
11:00		46	54							100
12:00 PM		70	58							128
01:00		50	58							108
02:00		54	54							108
03:00		66	**74**							140
04:00		62	63							125
05:00		**74**	73							**147**
06:00		61	49							110
07:00		25	33							58
08:00		16	27							43
09:00		5	12							17
10:00		2	10							12
11:00		1	4							5
Total		882	882							1764
Percent		50.0%	50.0%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	87	94	-	-	-	-	-	-	181
PM Peak	-	17:00	15:00	-	-	-	-	-	-	17:00
Vol.	-	74	74	-	-	-	-	-	-	147
Grand Total		882	882							1764
Percent		50.0%	50.0%							
ADT		ADT 1,764		AADT 1,764						

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

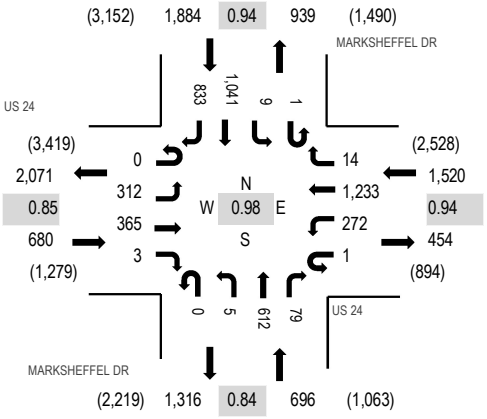
Site Code: 8
Station ID: 8
HWY 24 N.O. GARRETT RD

Start Time	07-Aug-24 Wed	NB	SB							Total
12:00 AM		68	44							112
01:00		48	34							82
02:00		28	33							61
03:00		37	69							106
04:00		82	153							235
05:00		171	570							741
06:00		467	1287							1754
07:00		**631**	**1500**							**2131**
08:00		542	1010							1552
09:00		519	745							1264
10:00		490	596							1086
11:00		514	592							1106
12:00 PM		599	676							1275
01:00		691	625							1316
02:00		797	590							1387
03:00		1136	692							1828
04:00		**1332**	**747**							**2079**
05:00		1302	742							2044
06:00		723	507							1230
07:00		446	291							737
08:00		375	238							613
09:00		254	130							384
10:00		177	123							300
11:00		96	80							176
Total		11525	12074							23599
Percent		48.8%	51.2%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	631	1500	-	-	-	-	-	-	2131
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	1332	747	-	-	-	-	-	-	2079
Grand Total		11525	12074							23599
Percent		48.8%	51.2%							
ADT		ADT 23,599		AADT 23,599						

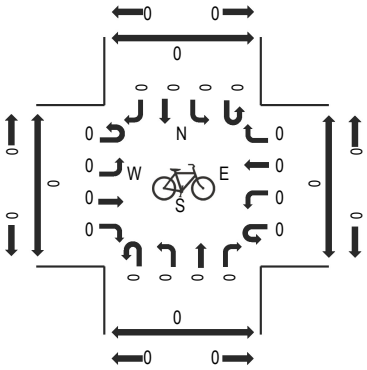
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 MARKSHEFFEL DR & US 24 AM
Date: Wednesday, February 26, 2025
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

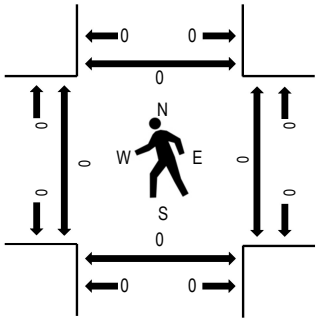
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

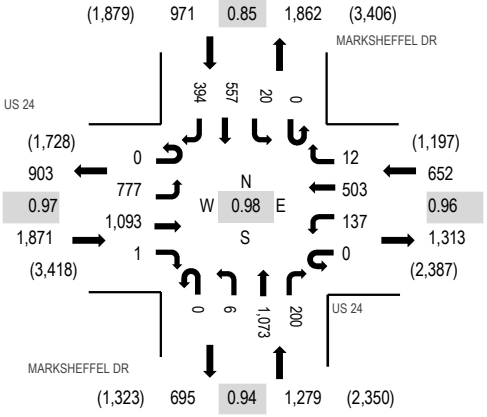
Traffic Counts - Motorized Vehicles

Interval Start Time	US 24 Eastbound				US 24 Westbound				MARKSHEFFEL DR Northbound				MARKSHEFFEL DR 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	70	71	0	0	55	307	4	0	1	164	22	0	3	256	241	1,194	4,780	0	0	0	0
7:15 AM	0	73	97	1	1	72	331	2	0	1	123	22	0	2	237	222	1,184	4,536	0	0	0	0
7:30 AM	0	73	92	1	0	63	280	4	0	2	187	17	1	2	280	184	1,186	4,196	0	0	0	0
7:45 AM	0	96	105	1	0	82	315	4	0	1	138	18	0	2	268	186	1,216	3,782	0	0	0	0
8:00 AM	0	52	94	1	0	39	249	6	0	0	91	19	0	2	239	158	950	3,242	0	0	0	0
8:15 AM	0	60	96	1	0	54	219	6	0	4	67	15	0	1	181	140	844		0	0	0	0
8:30 AM	0	55	89	2	1	33	178	7	0	3	69	15	0	7	180	133	772		0	0	0	0
8:45 AM	0	60	89	0	0	47	167	2	0	0	76	8	0	4	126	97	676		0	0	0	0
Count Total	0	539	733	7	2	445	2,046	35	0	12	915	136	1	23	1,767	1,361	8,022		0	0	0	0
Peak Hour	0	312	365	3	1	272	1,233	14	0	5	612	79	1	9	1,041	833	4,780		0	0	0	0

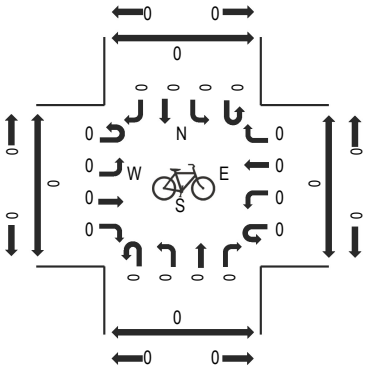
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 MARKSHEFFEL DR & US 24 PM
Date: Wednesday, February 26, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

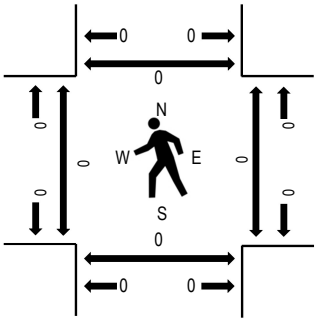
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

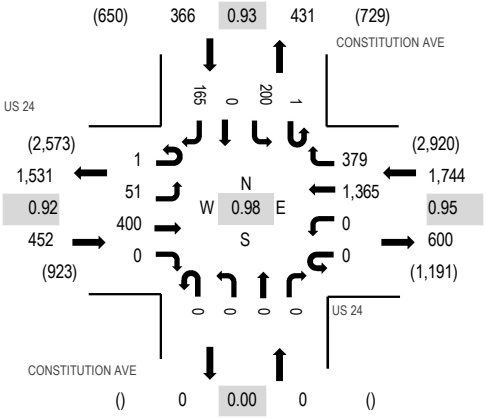
Traffic Counts - Motorized Vehicles

Interval Start Time	US 24 Eastbound				US 24 Westbound				MARKSHEFFEL DR Northbound				MARKSHEFFEL DR 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	188	246	2	0	30	113	2	0	2	293	65	0	3	163	85	1,192	4,757	0	0	0	0
4:15 PM	0	201	263	0	0	34	124	1	0	0	271	67	0	6	129	81	1,177	4,773	0	0	0	0
4:30 PM	0	176	284	0	0	38	121	3	0	0	276	34	0	6	144	86	1,168	4,662	0	0	0	0
4:45 PM	0	211	273	0	0	38	118	6	0	2	284	58	0	4	124	102	1,220	4,459	0	0	0	0
5:00 PM	0	189	273	1	0	27	140	2	0	4	242	41	0	4	160	125	1,208	4,087	0	0	0	0
5:15 PM	0	169	236	0	0	33	121	2	0	4	233	46	0	1	132	89	1,066		0	0	0	0
5:30 PM	0	158	206	2	0	22	108	1	0	3	182	37	0	3	125	118	965		0	0	0	0
5:45 PM	0	143	197	0	0	12	101	0	0	2	173	31	0	3	107	79	848		0	0	0	0
Count Total	0	1,435	1,978	5	0	234	946	17	0	17	1,954	379	0	30	1,084	765	8,844		0	0	0	0
Peak Hour	0	777	1,093	1	0	137	503	12	0	6	1,073	200	0	20	557	394	4,773		0	0	0	0

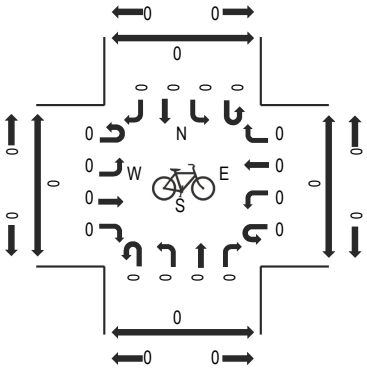
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 CONSTITUTION AVE & US 24 AM
Date: Wednesday, February 26, 2025
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

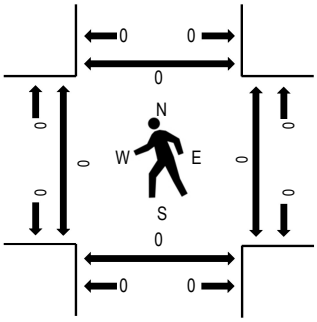
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

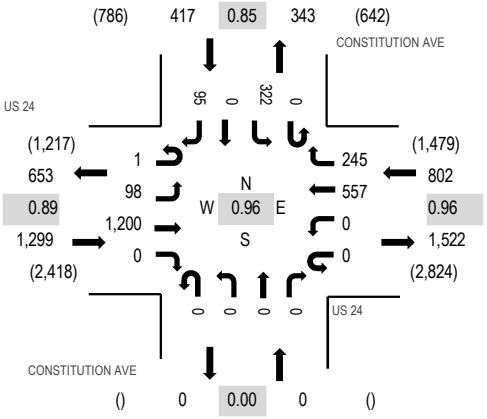
Traffic Counts - Motorized Vehicles

Interval Start Time	US 24 Eastbound				US 24 Westbound				CONSTITUTION AVE Northbound				CONSTITUTION AVE 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	7	96	0	0	0	366	95	0	0	0	0	0	38	0	36	639	2,562	0	0	0	0
7:15 AM	0	23	99	0	0	0	343	84	0	0	0	0	0	56	0	46	651	2,512	0	0	0	0
7:30 AM	0	7	110	0	0	0	323	109	0	0	0	0	0	53	0	40	642	2,317	0	0	0	0
7:45 AM	0	14	95	0	0	0	333	91	0	0	0	0	1	53	0	43	630	2,123	0	0	0	0
8:00 AM	0	13	117	0	0	0	292	80	0	0	0	0	0	50	0	37	589	1,931	0	0	0	0
8:15 AM	0	10	101	0	0	0	229	41	0	0	0	0	0	42	0	33	456		0	0	0	0
8:30 AM	0	13	97	0	0	0	210	67	0	0	0	0	0	41	0	20	448		0	0	0	0
8:45 AM	0	12	108	0	0	0	195	62	0	0	0	0	0	35	0	26	438		0	0	0	0
Count Total	1	99	823	0	0	0	2,291	629	0	0	0	0	1	368	0	281	4,493		0	0	0	0
Peak Hour	1	51	400	0	0	0	1,365	379	0	0	0	0	1	200	0	165	2,562		0	0	0	0

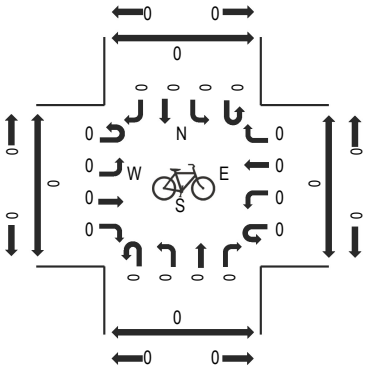
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 CONSTITUTION AVE & US 24 PM
Date: Wednesday, February 26, 2025
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

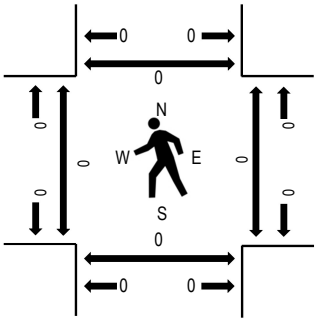
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	US 24 Eastbound				US 24 Westbound				CONSTITUTION AVE Northbound				CONSTITUTION AVE 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	25	299	0	0	0	126	44	0	0	0	0	0	80	0	29	603	2,492	0	0	0	0
4:15 PM	0	22	308	0	0	0	132	64	0	0	0	0	0	72	0	28	626	2,511	0	0	0	0
4:30 PM	0	31	280	0	0	0	135	56	0	0	0	0	0	72	0	30	604	2,518	0	0	0	0
4:45 PM	1	29	347	0	0	0	143	59	0	0	0	0	0	63	0	17	659	2,393	0	0	0	0
5:00 PM	0	21	271	0	0	0	142	66	0	0	0	0	0	97	0	25	622	2,191	0	0	0	0
5:15 PM	0	17	302	0	0	0	137	64	0	0	0	0	0	90	0	23	633		0	0	0	0
5:30 PM	0	21	205	0	0	0	112	58	0	0	0	0	0	68	0	15	479		0	0	0	0
5:45 PM	0	21	218	0	0	0	97	44	0	0	0	0	0	52	0	25	457		0	0	0	0
Count Total	1	187	2,230	0	0	0	1,024	455	0	0	0	0	0	594	0	192	4,683		0	0	0	0
Peak Hour	1	98	1,200	0	0	0	557	245	0	0	0	0	0	322	0	95	2,518		0	0	0	0

Intersection 645 at Woodmen Rd and Golden Sage Rd - Timing table, page 1

Page 1	Phases											
	1	2	3	4	5	6	7	8	9	10	11	12
Min Green	4	4	0	8	4	4	0	8	0	0	0	0
Passage Time I	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
Passage Time II	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
Max Green I	15	75	0	35	25	75	0	35	0	0	0	0
Max Green II	0	75	0	35	0	75	0	35	0	0	0	0
Yellow Clearance	5.5	5.5	0.0	6.0	5.5	5.5	0.0	6.0	0.0	0.0	0.0	0.0
Red Clearance	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduction	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduction	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0
Min Passage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Green Time	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert Time	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0
Advance Walk Time	0	0	0	0	0	0	0	0	0	0	0	0
Walk Time	0	7	0	7	0	7	0	7	0	0	0	0
Pedestrian Clearance	0	24	0	51	0	26	0	51	0	0	0	0
Handicap Walk	0	12	0	12	0	12	0	12	0	0	0	0
Handicap Ped Clearance	0	27	0	60	0	30	0	59	0	0	0	0
Woodmen Rd	X	X			X	X						
Golden Sage Rd				X				X				
Compass Direction	W	E		N	E	W		S				
Through, Turn or XPed	Left,prt	Thru		Thru	Left,prt	Thru		Thru				

Intersection 645 at Woodmen Rd and Golden Sage Rd - Sequence table, page 1

Page 1	Ring 1 Phases				Ring 2 Phases				Ring 3 Phases			
	1	2	3	4	5	6	7	8	9	10	11	12
State 1		V & P				V & P						
Barrier 1												
State 2	Vehicle				Vehicle							
Barrier 2	XXXXXXXXXXXXXXXXXXXXX				XXXXXXXXXXXXXXXXXXXXX							
State 3				V & P				V & P				
Barrier 3	XXXXXXXXXXXXXXXXXXXXX				XXXXXXXXXXXXXXXXXXXXX							
State 4												
Barrier 4												
State 5												
Barrier 5												
State 6												
Barrier 6												
State 7												
Barrier 7												
State 8												
Barrier 8												
State 9												
Barrier 9												
State 10												
Barrier 10												
State 11												
Barrier 11												
State 12												
Barrier 12												

Intersection 645 at Woodmen Rd and Golden Sage Rd - Phases control table, page 1

Page 1	Vehicle Phases _____111 123456789012		Ped Phases _____111 123456789012
Min Recalls		Ped Recalls	
Max Recalls	2 6	Handicap Ped Recalls	
Recall If Maxed		Soft Ped Recalls	
Dual Entry	4 8	Do Not Recall Ped	2 4 6 8
Do Not Skip		Allow Walk Reduction	
Simultaneous Gap Out		Hold In Walk	
Restricted Phases		Allow Ped Re-service	2 6
Sequential Initial Timing		Rest In Walk	No
Max Timer Starts For Call			
Reduction Starts For Call			
Red To Avoid Left Turn Trap			
Rest In Red	No		

Intersection 645 at Woodmen Rd and Golden Sage Rd - Spec signaling cntrl tbl, pg 1

Page 1							
Signaling Control 1				Signaling Control 2			
Function	Flashing permissive left turn	Timer 1	2.0	Function	Flashing permissive left turn	Timer 1	2.0
Operand	0	Timer 2	0.0	Operand	0	Timer 2	0.0
Trigger	Always enabled	Timer 3	0.0	Trigger	Always enabled	Timer 3	0.0
	_____111	Output 1	25		_____111	Output 1	1
	123456789012	Output 2	34		123456789012	Output 2	35
Phases 1	5	Output 3	28	Phases 1	1	Output 3	20
Phases 2	2 6	Output 4	1	Phases 2	2 6	Output 4	1
Overlaps 1				Overlaps 1			
Overlaps 2				Overlaps 2			
Signaling Control 3				Signaling Control 4			
Function	None	Timer 1	0.0	Function	None	Timer 1	0.0
Operand	0	Timer 2	0.0	Operand	0	Timer 2	0.0
Trigger	Always enabled	Timer 3	0.0	Trigger	Always enabled	Timer 3	0.0
	_____111	Output 1	1		_____111	Output 1	1
	123456789012	Output 2	1		123456789012	Output 2	1
Phases 1		Output 3	1	Phases 1		Output 3	1
Phases 2		Output 4	1	Phases 2		Output 4	1
Overlaps 1				Overlaps 1			
Overlaps 2				Overlaps 2			

Intersection 645 at Woodmen Rd and Golden Sage Rd - Schedule table, events 1-25

Event	Ena-		Event Parameters		Start					Duration	Stop		Repetition		
Num	bled	Event Type	Param 1	Param 2	Mon	Day	Hour	Min	Sec	Minutes	Mon	Day	Repeat	Intervals	Priority
1	Yes	Run Plan	Plan 1	Ofst #1	1	1	06	00	00	900	12	31	Weekly	SMTWTFS	Medium
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															

Intersection 645 at Woodmen Rd and Golden Sage Rd - Coordination table, plans 1-2

	_____111	Cycle Length	138			Alternate	Alternate	Alternate
Plan 1	123456789012	Offset 1	121	Phases	Splits	Mins	Passages	Maxes
Coordinated		Offset 2	8	1	28	0	0.0	28
Phases	2 6	Offset 3	0	2	70	0	0.0	80
Secondary		Offset 4	0	3	0	0	0.0	0
Coordinated		Relative Secondary Offset	0	4	40	0	0.0	43
Phases		Permissive Period	Auto	5	28	0	0.0	28
Extra Time		Max Cycle Addition	34	6	70	0	0.0	80
Phases		Max Cycle Subtraction	34	7	0	0	0.0	0
Additional		Coord Actuated Period	0	8	40	0	0.0	43
Max Recalls		Top Of Cycle Green Point	End	9	0	0	0.0	0
Units	Seconds	Big Bang Preempt Recvry	No	10	0	0	0.0	0
		Big Bang Ped Recovery	No	11	0	0	0.0	0
		Min Lagging Left Split	0%	12	0	0	0.0	0
	_____111	Cycle Length	0			Alternate	Alternate	Alternate
Plan 2	123456789012	Offset 1	0	Phases	Splits	Mins	Passages	Maxes
Coordinated		Offset 2	0	1	0	0	0.0	0
Phases		Offset 3	0	2	0	0	0.0	0
Secondary		Offset 4	0	3	0	0	0.0	0
Coordinated		Relative Secondary Offset	0	4	0	0	0.0	0
Phases		Permissive Period	Auto	5	0	0	0.0	0
Extra Time		Max Cycle Addition	0	6	0	0	0.0	0
Phases		Max Cycle Subtraction	0	7	0	0	0.0	0
Additional		Coord Actuated Period	0	8	0	0	0.0	0
Max Recalls		Top Of Cycle Green Point	End	9	0	0	0.0	0
Units	Seconds	Big Bang Preempt Recvry	No	10	0	0	0.0	0
		Big Bang Ped Recovery	No	11	0	0	0.0	0
		Min Lagging Left Split	0%	12	0	0	0.0	0

CDOT

MaxTime Timing Sheet

2.0.16 Update

Administration

Cross Black_White.jpg

Unit Information

Controller ID	0
Main St.	24G
Side St.	Garrett

Adapter	IP Address	Subnet Mask	Default Gateway	ARP	Mode
1				Disable	Static
2				Disable	Static

Serial Ports:

Port	Description	Function	Address	Baud	Bits	Stop	Parity	Flow	CTS	RTS
1	Port 2/C21S	None	1	9600	8	1	None	None	0	0
2	Aux_P3/C22S	None	1	9600	8	1	None	None	0	0
3	SDLC Port 1	None	1	9600	8	1	None	None	0	0
4	Com A/C50S	None	1	9600	8	1	None	None	0	0
5	FIO	None	1	9600	8	1	None	None	0	0
6	DISPLAY/C60M	None	1	9600	8	1	None	None	0	0
7	SP7	None	1	9600	8	1	None	None	0	0
8	SP8/Com B	None	1	9600	8	1	None	None	0	0

Unit Parameters

Startup Flash	1
All Red Exit	0
MCE Seq.	1
Master By TOD	Disable

Auto Ped Clr	Enable
Grn Flash Freq.	60
Start Yellow	0.0
Flash CVM	Disable

Red Revert	4.0
Yel Flash Freq.	60
Start Red	0.0
All Red Flash	Disable
Auto Ped Clear	Enable

Backup Time	600
MCE Enable	Enable
Start Clear Hold	6
3 Phs Dia Seq	
4 Phs Dia Seq	

Ext Mode	Disable
Free Seq.	1

Phase Parameters

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Walk Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clear Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	4	7	4	4	4	7	4	4	1	1	1	1	1	1	1	1	1	1	1	1
Min Green 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passage	2.0	4.0	2.0	2.0	2.0	4.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max-1	20	50	30	40	30	50	30	20	0	0	0	0	0	0	0	0	0	0	0	0
Max-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conditional Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yel Change	3.0	5.0	3.0	3.0	3.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Add Red Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Revert	0.0	0.0	5.0	5.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars B4 Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dyn Max Limit	40	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0
Dyn Max Step	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advance Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Ped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alt Ped Clr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ped Service Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre Clearance	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre Clearance 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear Ext Pass	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Jump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv Warning Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Options

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X				X		X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry																				
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher		X																		
No Ped Str Up Call																				
Ped Clr OVTG																				
Flash Exit Call																				
Flash Exit Ped Call																				
MinGreen2																				
MaxGreen2																				
MaxGreen3																				
Ped2																				
Ped Clear Pre Clear																				
Ped NA+ Mode																				
Red Rest																				
Serve Evy Oth Even																				
Serve Evy Oth Odd																				
Coord Ped Yield																				
Ped Recycle																				
Coutdown																				

No Serve Phases

Sequence 1	
Ph.	No Serve Phases
1	
2	

Sequence 2	
Ph.	No Serve Phases
1	
2	

Sequence 3	
Ph.	No Serve Phases
1	
2	

Sequence 4	
Ph.	No Serve Phases
1	
2	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

3	
4	
5	
6	
7	
8	

Sequence 1	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 2	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 3	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 4	
9	
10	
11	
12	
13	
14	
15	
16	

Phase Configuration

Ph.	Startup	Ring	Concurrent	Startup Min	Description
1	Phase Not On	1	6	0	
2	Green No Walk	1	6	0	
3	Phase Not On	0		0	
4	Phase Not On	0		0	
5	Phase Not On	0		0	
6	Green No Walk	2	1,2	0	
7	Phase Not On	0		0	
8	Phase Not On	2		0	
9	None	0		0	
10	None	0		0	
11	None	0		0	
12	None	0		0	
13	None	0		0	
14	None	0		0	
15	None	0		0	
16	None	0		0	
17	None	0		0	
18	None	0		0	
19	None	0		0	
20	None	0		0	

Sequence Configuration

Sequence 1

Ring	Phases
1	1,2,a,b
2	6,a,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 2

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 3

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Sequence 4

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15		15		15		15	
16		16		16		16	

Sequence 5

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 6

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 7

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 8

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,7,8,b
3	
4	
5	
6	

Sequence 5

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 6

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 7

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 8

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 9

Ring	Phases
1	1,2,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 10

Ring	Phases
1	2,1,a,3,4,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 11

Ring	Phases
1	1,2,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 12

Ring	Phases
1	2,1,a,4,3,b
2	5,6,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Sequence 13

Ring	Phases
1	1,2,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Sequence 14

Ring	Phases
1	2,1,a,3,4,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Sequence 15

Ring	Phases
1	1,2,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Sequence 16

Ring	Phases
1	2,1,a,4,3,b
2	6,5,a,8,7,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	
16	

14	
15	
16	

14	
15	
16	

14	
15	
16	

Sequence 17

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 18

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 19

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 20

Ring	Phases
1	
2	
3	
4	
5	
6	
7	
8	

Sequence 17

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 18

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 19

9	
10	
11	
12	
13	
14	
15	
16	

Sequence 20

9	
10	
11	
12	
13	
14	
15	
16	

Global Phase Recalls

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Min																				
Max		X				X														
Ped																				
Act Walk Rest																				

Global Veh Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0
Global Failed Recall	None
Detector Reset Enable	Enabled

Global Ped Det Diagnostics

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Global Pri/Pre Det Diag

Global No Activity	0
Global Max Presence	0
Global Erractic Count	0

Vehicle Detection Parameters

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
1	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
2	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
3	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
4	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
5	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
6	2	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
7	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
8	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
9	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
10	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
11	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
12	4	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
13	1	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
14	3	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
15	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

16	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
17	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
18	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
19	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
20	6	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
21	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
22	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
23	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
24	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
25	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
26	8	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
27	5	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
28	7	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
29	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
30	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
31	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
32	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Det.	Call Phs	Call Ped	Call Ovl	Add Call Phases	Sw Phs	Delay	Extend	Queue Limit	Ext Hold	No Activity	Max Pres	Erratic Counts	Failed Time	Failed Recall	Fail Link	Description
33	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
34	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
35	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
36	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
37	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
38	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
39	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
40	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
41	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
42	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
43	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
44	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
45	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
46	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
47	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
48	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
49	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
50	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
51	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
52	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
53	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
54	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
55	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
56	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
57	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
58	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
59	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
60	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
61	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
62	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
63	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
64	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
65	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
66	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
67	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
68	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
69	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
70	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

71	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	None	0	

Vehicle Detection Options

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	
Added Initial																				
Queue																				
Call	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X		X
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend	X	X	X	X	X		X	X												
Added Initial																				
Queue																				
Call	X	X	X	X		X	X	X												
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Volume Detector																				
Occupancy																				
Yellow Lock Call																				
Red Lock call																				
Extend																				
Added Initial																				
Queue																				
Call																				
Terminate																				
Min Green 2																				
Protected Perm																				
Disable Dly Lead																				
Disable TS2 Diag																				

Detector	61	62	63	64	65	66	67	68	69	70	71	72
Volume Detector												
Occupancy												
Yellow Lock Call												
Red Lock call												
Extend												
Added Initial												
Queue												

Data Collection Period	0
Number of Periods	1

Call												
Terminate												
Min Green 2												
Protected Perm												
Disable Dly Lead												
Disable TS2 Diag												

Speed Detectors

Det	Enable	Type	Units	Min Log	Max Log	Car Length	Det Length	Trail Det	Trap Length
1		Single	Inches	5	80	0	0	0	0
2		Single	Inches	5	80	0	0	0	0
3		Single	Inches	5	80	0	0	0	0
4		Single	Inches	5	80	0	0	0	0
5		Single	Inches	5	80	0	0	0	0
6		Single	Inches	5	80	0	0	0	0
7		Single	Inches	5	80	0	0	0	0
8		Single	Inches	5	80	0	0	0	0

Pedestrian Detectors

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
1	0	0		0	0	0	0	0
2	2	0		0	0	0	0	0
3	0	0		0	0	0	0	0
4	4	0		0	0	0	0	0
5	0	0		0	0	0	0	0
6	6	0		0	0	0	0	0
7	0	0		0	0	0	0	0
8	8	0		0	0	0	0	0
9	0	0		0	0	0	0	0
10	0	0		0	0	0	0	0
11	0	0		0	0	0	0	0
12	0	0		0	0	0	0	0
13	0	0		0	0	0	0	0
14	0	0		0	0	0	0	0
15	0	0		0	0	0	0	0
16	0	0		0	0	0	0	0
17	0	0		0	0	0	0	0
18	0	0		0	0	0	0	0
19	0	0		0	0	0	0	0
20	0	0		0	0	0	0	0

Det	Call Phs	Call Ovlp	Add Call Phs	Walk 2	Clear 2	No Act	Max Pres	Erratic Count
21	0	0		0	0	0	0	0
22	0	0		0	0	0	0	0
23	0	0		0	0	0	0	0
24	0	0		0	0	0	0	0
25	0	0		0	0	0	0	0
26	0	0		0	0	0	0	0
27	0	0		0	0	0	0	0
28	0	0		0	0	0	0	0
29	0	0		0	0	0	0	0
30	0	0		0	0	0	0	0
31	0	0		0	0	0	0	0
32	0	0		0	0	0	0	0
33	0	0		0	0	0	0	0
34	0	0		0	0	0	0	0
35	0	0		0	0	0	0	0
36	0	0		0	0	0	0	0
37	0	0		0	0	0	0	0
38	0	0		0	0	0	0	0
39	0	0		0	0	0	0	0
40	0	0		0	0	0	0	0

Pri/Pre Detectors

Det	Description	Low Call	High Call	Low Num	high Num	Lead/Trail	Arrival Time	Pri Dlay	Dlay	Ext	Min On	Pri Olvp	No Act	Max Pres	Erratic Count
1		None	None	0	0	None	0	0	0	0	0		0	0	0
2		None	None	0	0	None	0	0	0	0	0		0	0	0
3		None	None	0	0	None	0	0	0	0	0		0	0	0
4		None	None	0	0	None	0	0	0	0	0		0	0	0
5		None	None	0	0	None	0	0	0	0	0		0	0	0
6		None	None	0	0	None	0	0	0	0	0		0	0	0
7		None	None	0	0	None	0	0	0	0	0		0	0	0
8		None	None	0	0	None	0	0	0	0	0		0	0	0

Overlaps

OLP	Enabled	Type	Included Phs	Modifier Phs	Modifier Ovlps	Neg Phases	Inhibit Neg Phs	Neg Ovlps
1	Enabled	FYA - 4 Sec	2	1				
2	Disabled	Off						
3	Disabled	FYA - 4 Sec	4	3				

4	Disabled	Off						
5	Disabled	FYA - 4 Sec	6	5				
6	Disabled	Off						
7	Disabled	FYA - 4 Sec	8	7				
8	Disabled	Off						
9	Disabled	Off						
10	Disabled	Off						
11	Disabled	Off						
12	Disabled	Off						
13	Disabled	Off						
14	Disabled	Off						
15	Disabled	Off						
16	Disabled	Off						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
1						
2						
3						
4						
5						
6						

OLP	TrG Omit Phs	Negative Peds	Neg Ped Ovlps	Grn Sup Phs	N Ped Phs Calls	Description
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

OLP	Trail GRN	Trail YEL	Trail RED	Walk 1	Ped Clr 1	Walk 2	Ped Clr 2	Delay	Flash	Min Green	Mx Grn Ext	Red Revert	Flash Inactive	Flash Alt	Walk Rest
1	0	0.0	0.0	0	0	0	0	2.0	On	0	0	0.0	Off	Off	Off
2	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
3	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
4	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
5	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
6	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
7	0	0.0	0.0	0	0	0	0	0.0	On	0	0	0.0	Off	Off	Off
8	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
9	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
10	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
11	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
12	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
13	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
14	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
15	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off
16	0	0.0	0.0	0	0	0	0	0.0	Off	0	0	0.0	Off	Off	Off

Overlap Options

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Startup Call																
Recall																

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call for Service																
Trail Grn Bridge																

No Veh Reserv														
No Hold Trail Exit														
Ped Recycle														
No Yellow Protect														
No Bridging														
LRT Prepare Go														

FYA Prot. Red Cl														
Phs Intvl Override														
Queue Jump														
No FYA Ped Wlk														
Term After Call														

Custom Overlap Rules

Rule	Custom Ovlp	Incl. State	Mod. State	Neg. State	Output	Flash
1	Disable	Any	Any	Any	Not Set	Not Set
2	Disable	Any	Any	Any	Not Set	Not Set
3	Disable	Any	Any	Any	Not Set	Not Set
4	Disable	Any	Any	Any	Not Set	Not Set
5	Disable	Any	Any	Any	Not Set	Not Set
6	Disable	Any	Any	Any	Not Set	Not Set
7	Disable	Any	Any	Any	Not Set	Not Set
8	Disable	Any	Any	Any	Not Set	Not Set
9	Disable	Any	Any	Any	Not Set	Not Set
10	Disable	Any	Any	Any	Not Set	Not Set

Coordination Parameters

Operational Mode	Automatic
Coordination Mode	Pattern
Correction Mode	Shortway (Auto)

Maximum Mode	Per Pattern
Force Mode	Per Pattern
Transition Cover Ped	Pattern

Max Cyc Limit %	15
Min Cyc Limit %	15
Max Dwell	0

Patterns

		Offset					Ref	Coord	Force	Max	Trans	Min	Phs	Det	Ped	Ovlp	Pri	
Patt.	Cycle	1	2	3	Split	Seq	Col	Mode	Mode	Mode	Ped	Perm	Pln	Pln	Pln	Pln	Pln	Description
1	140	25	0	0	1	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
2	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
3	140	82	0	0	3	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
4	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
5	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
6	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
7	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
8	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
9	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
10	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
11	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
12	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
13	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
14	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
15	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
16	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
17	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
18	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
19	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	
20	0	0	0	0	0	0	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	1	1	

Split Parameters

Split 1				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	15	0	0				Fix	None	0	0	Float
2	90	0	0	X	X		Fix	Max Rcl	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	105	0	0	X	X		Fix	Max Rcl	0	0	Float
7	0	0	0				Fix	None	0	0	Float

8	35	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 2				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 3				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	15	0	0				Fix	None	0	0	Float
2	100	0	0	X	X		Fix	Max Rcl	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	115	0	0	X	X		Fix	Max Rcl	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	25	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 4				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float

8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 5				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float

Split 6				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 7				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float

6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 8				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float

Split 9				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 10				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float

3	0	0	0				Fix	None	0	0	Float
4	0	0	0				Fix	None	0	0	Float
5	0	0	0				Fix	None	0	0	Float
6	0	0	0				Fix	None	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	0	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Ring Plan 1

Ring	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Offset	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Early Coord Gap Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 1 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 2 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 3 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 4 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 5 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 6 Off

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 7 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 8 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 9 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 10 Off

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
X	X	X	X	X	X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J	A	S	O	N	D								17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

Day Plan 0 On

Month of Year						Days of Week							Days of Month															
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 0 On

Month of Year						Days of Week							Days of Month													
J	F	M	A	M	J	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

J	A	S	O	N	D

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Day Plan 1

Event	Hour	Min.	Act
1	5	30	1
2	9	0	10
3	14	0	3
4	18	0	10
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 2

Event	Hour	Min.	Act
1	0	1	10
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 3

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 4

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 5

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 6

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 7

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 8

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 9

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 10

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 11

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 12

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 13

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 14

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 15

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Day Plan 16

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	

Event	Hour	Min.	Act
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Event	Hour	Min.	Act
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Event	Hour	Min.	Act
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Event	Hour	Min.	Act
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 17

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 18

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 19

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Day Plan 20

Event	Hour	Min.	Act
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	0	0	
8	0	0	
9	0	0	
10	0	0	

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
1	Pattern 1											
2	Pattern 2											
3	Pattern 3											
4	Pattern 4											
5	Pattern 5											
6	Pattern 6											
7	Pattern 7											
8	Pattern 8											
9	Pattern 9											
10	Free											
11	None											
12	None											
13	None											
14	None											
15	None											
16	None											
17	None											
18	None											
19	None											
20	None											
21	None											
22	None											
23	None											
24	None											
25	None											
26	None											
27	None											
28	None											
29	None											
30	None											
31	None											
32	None											

Actions

		Aux.			Special Functions							
Act	Pattern	1	2	3	1	2	3	4	5	6	7	8
33	None											
34	None											
35	None											
36	None											
37	None											
38	None											
39	None											
40	None											
41	None											
42	None											
43	None											
44	None											
45	None											
46	None											
47	None											
48	None											
49	None											
50	None											
51	None											
52	None											
53	None											
54	None											
55	None											
56	None											
57	None											
58	None											
59	None											
60	None											
61	None											
62	None											
63	None											
64	None											

Action Commands

Action 1

Cmd	Command	Indexes
1	None	
2	None	

Action 2

Cmd	Command	Indexes
1	None	
2	None	

3	None	
4	None	
5	None	
6	None	
7	None	
8	None	
9	None	
10	None	

3	None	
4	None	
5	None	
6	None	
7	None	
8	None	
9	None	
10	None	

Master Sections By TOD

Action	1	2	3	4	5	6	7	8	9	10
Master Section 1										
Master Section 2										
Master Section 3										
Master Section 4										
Master Section 5										
Master Section 6										
Master Section 7										
Master Section 8										
Master Section 9										
Master Section 10										
Master Section 11										
Master Section 12										
Master Section 13										
Master Section 14										
Master Section 15										
Master Section 16										

Queue Responsive By TOD

Action	1	2	3	4	5	6	7	8	9	10
Queue Resp Plan 1										
Queue Resp Plan 2										
Queue Resp Plan 3										
Queue Resp Plan 4										
Queue Resp Plan 5										
Queue Resp Plan 6										
Queue Resp Plan 7										
Queue Resp Plan 8										
Queue Resp Plan 9										
Queue Resp Plan 10										
Queue Resp Plan 11										
Queue Resp Plan 12										
Queue Resp Plan 13										
Queue Resp Plan 14										
Queue Resp Plan 15										
Queue Resp Plan 16										

Preemption Parameters

Preempt	1	2	3	4	5	6	7	8
Link	0	0	0	0	0	0	0	0
Delay	0	0	0	0	0	0	0	0
Min Duration	0	0	0	0	0	0	0	0
Min Presence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Presence	0	0	0	0	0	0	0	0
Enter Min Green	0	0	0	0	0	0	0	0
Enter Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Ent. Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Min Walk	0	0	0	0	0	0	0	0
Ent. Ped Clear	255	255	255	255	255	255	255	255
Track Green	0	0	0	0	0	0	0	0
Max Track Grn	0	0	0	0	0	0	0	0
Track Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Red Clear	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Green	0	0	0	0	0	0	0	0
Track 2 Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track 2 Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Track Ext Gate Dn	0	0	0	0	0	0	0	0
Dwell Green	0	0	0	0	0	0	0	0
Exit Ped Clear	255	255	255	255	255	255	255	255
Exit Yellow	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Exit Red	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Dwell Ext Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Exit Green	0	0	0	0	0	0	0	0
Exit Max Time	0	0	0	0	0	0	0	0

Preempt	1	2	3	4	5	6	7	8
Non Lock Mem								
Not Overide Flash								
NotOverideNextPre								
Flash Dwell								
Ped Recycle								
Imm Ped Clear								
Dwell Only Status								
All Red Flash Dwell								
Allow All Overlaps								
Req All Red Entry								
Req Gate Dwn Trck Exit								
Req Gate Up Dwl Exit								
Normal On/Off Input								
Track Clear Override								
Aux Function 1								
Aux Function 2								
Aux Function 3								
Special Function 1								
Special Function 2								
Special Function 3								
Special Function 4								
Special Function 5								
Special Function 6								
Special Function 7								
Special Function 8								

Require CRC
Disabled

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Pre	1	2	3	4	5	6	7	8

Sp F9								Sp F11								Sp F13								Sp F15							
Sp F10								Sp F12								Sp F14								Sp F16							

Preemption Configuration

Preempt	1	2	3	4	5	6	7	8
Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Type	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh	Emerg Veh
Description								
Track Phases								
Track 2 Phases								
Track Overlaps								
Track 2 Overlaps								
Dwell Phase								
Dwell Ped								
Dwell Overlaps								
Cycling Phases								
Cycling Peds								
Cycling Overlaps								
Exit Phases								
Exit Overlaps								
Exit Veh Calls								
Exit Ped Calls								
Recovery Omit Phs								
Max Pres Action	0	0	0	0	0	0	0	0
Exit Type	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases	Exit Phases
Exit Max Mode	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled

Cabinet Config

Run ITS on NEMA port 1	No	Enable TS2/ATC Stop Time		Disable TS2 Fault Flash	
Run ITS on 2070-1C C13S	No	Disable TS2 Startup Call		Disable TS2 Cab. Alarms	

IO Modules

IO Mod	TYPE
1	Caltrans 332
2	None
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None

Channel Configuration

Chan	Ctrl Type	Source	MMU Channel
1	Olp	1	1
2	Phs Veh	2	2
3	None	3	3
4	None	4	4
5	None	5	5
6	Phs Veh	6	6
7	None	7	7
8	Phs Veh	8	8
9	Phs Veh	1	9
10	Wrn Flash	2	10

Chan	Ctrl Type	Source	MMU Channel
11	None	5	11
12	None	7	12
13	None	2	13
14	None	4	14
15	Phs Ped	6	15
16	None	8	16
17	None	0	17
18	None	0	18
19	None	0	19
20	None	0	20

Channel Options

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Yellow																
Flash Red	X	X	X	X	X	X	X	X								
Alt Flash	X			X	X			X								
Channel	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Flash Yellow																
Flash Red																
Alt Flash																

Phase Intervals

Interval	Description	Red	Yel	Grn	Type
1	Not Act	On	Off	Off	Red

Interval	Description	Red	Yel	Grn	Type
7	Pre Clr	Off	Off	On	Green

2	Dly Grn	On	Off	Off	Red
3	Pre Grn	Off	Off	On	Green
4	Min Grn	Off	Off	On	Green
5	Grn Ext	Off	Off	On	Green
6	Grn Dwell	Off	Off	On	Green

8	Yel Change	Off	On	Off	Yellow
9	Red Clr	On	Off	Off	Red
10	Red Dwell	On	Off	Off	Red
11	Barrier	On	Off	Off	Red
12	Pre Clr 2	Off	Off	Off	Not Def.

Pedestrian Intervals

Interval	Description	DWK	CLR	Wlk	Type
1	Not Active	On	Off	Off	Dont Walk
2	Dly Ped	On	Off	Off	Dont Walk
3	Walk	Off	Off	On	Walk
4	Walk Dwell	Off	Off	On	Walk
5	Flsh DWalk	Flash	Off	Off	Ped Clear
6	DWalk	On	Off	Off	Dont Walk

Alarm Config

Alarm	Name
1	
2	
3	
4	
5	

Alarm	Name
6	
7	
8	
9	
10	

Manual Control Phase Groups

Grp 1		Grp 2		Grp 3		Grp 4		Grp 5		Grp 6		Grp 7		Grp 8	
Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph	Ring	Ph
1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0
5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0
6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0
7	0	7	0	7	0	7	0	7	0	7	0	7	0	7	0
8	0	8	0	8	0	8	0	8	0	8	0	8	0	8	0
9	0	9	0	9	0	9	0	9	0	9	0	9	0	9	0
10	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
11	0	11	0	11	0	11	0	11	0	11	0	11	0	11	0
12	0	12	0	12	0	12	0	12	0	12	0	12	0	12	0
13	0	13	0	13	0	13	0	13	0	13	0	13	0	13	0
14	0	14	0	14	0	14	0	14	0	14	0	14	0	14	0
15	0	15	0	15	0	15	0	15	0	15	0	15	0	15	0
16	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0

Prioritor Settings

Enabled	Lock Out Time	PRS Time to Live
No	0	300

Prioritor	Enabled	Priority	Priority Phs	Skipped Phs	Skip Peds	Delay Time	Est Travel	Mx Presence	Output Dly
1	On	0				0	0	0	0
2	On	0				0	0	0	0
3	On	0				0	0	0	0
4	On	0				0	0	0	0
5	On	0				0	0	0	0
6	On	0				0	0	0	0
7	On	0				0	0	0	0
8	On	0				0	0	0	0

Prioritor	Res. Lockout	Free Pri Min	Free Pri Max	Description
1	0	Min Green	Max Green	
2	0	Min Green	Max Green	
3	0	Min Green	Max Green	
4	0	Min Green	Max Green	
5	0	Min Green	Max Green	
6	0	Min Green	Max Green	
7	0	Min Green	Max Green	
8	0	Min Green	Max Green	

Prioritor	1	2	3	4	5	6	7	8
Lock After First Serve								
Pres. Only Check-in								
Extend Walk Rest								

PRS Reservice Times

Class	1	2	3	4	5	6	7	8	9	10
Time	0	0	0	0	0	0	0	0	0	0

Peer Configuration

Ctrl	Peer ID	Device Type	IP address	IP Port	Http Port	Serial Port	Serial Addr.	Master Sect.	P2P TO	Description
1	0	Peer MaxTime		161	80	0	0	0	15	
2	0	Peer MaxTime		161	80	0	0	0	15	
3	0	Peer MaxTime		161	80	0	0	0	15	
4	0	Peer MaxTime		161	80	0	0	0	15	
5	0	Peer MaxTime		161	80	0	0	0	15	
6	0	Peer MaxTime		161	80	0	0	0	15	
7	0	Peer MaxTime		161	80	0	0	0	15	
8	0	Peer MaxTime		161	80	0	0	0	15	
9	0	Peer MaxTime		161	80	0	0	0	15	
10	0	Peer MaxTime		161	80	0	0	0	15	

Master Section Configuration

Section	Control	Poll	Req #	Fail Time	Algorithm Period	Description
1	None	60	1	300	240	
2	None	60	1	300	240	
3	None	60	1	300	240	
4	None	60	1	300	240	
5	None	60	1	300	240	
6	None	60	1	300	240	
7	None	60	1	300	240	
8	None	60	1	300	240	
9	None	60	1	300	240	
10	None	60	1	300	240	
11	None	60	1	300	240	
12	None	60	1	300	240	
13	None	60	1	300	240	
14	None	60	1	300	240	
15	None	60	1	300	240	
16	None	60	1	300	240	

User Program Info

Pgrm	Description
1	
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Pgrm	Description
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APPENDIX B

Level of Service Definitions

The following information is referenced from the Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 6th Edition, Transportation Research Board, 2016: 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, 6th Edition, Transportation Research Board, 2016: 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

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	96	59	15	11	90
Future Vol, veh/h	54	96	59	15	11	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	104	64	16	12	98
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	7.9	8.5	5.9
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	8	8	54	96	6	6	90
LT Vol	59	0	0	54	0	0	0	0
Through Vol	0	8	8	0	0	6	6	0
RT Vol	0	0	0	0	96	0	0	90
Lane Flow Rate	64	8	8	59	104	6	6	98
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.1	0.012	0.008	0.087	0.121	0.009	0.009	0.074
Departure Headway (Hd)	5.606	5.103	3.361	5.361	4.163	5.151	5.151	2.705
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	642	704	1067	662	849	698	698	1329
Service Time	3.318	2.815	1.073	3.144	1.946	2.857	2.857	0.41
HCM Lane V/C Ratio	0.1	0.011	0.007	0.089	0.122	0.009	0.009	0.074
HCM Control Delay, s/veh	8.9	7.9	6.1	8.7	7.5	7.9	7.9	5.6
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0	0	0.3	0.4	0	0	0.2

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	7	1	3	7	0
Future Vol, veh/h	2	7	1	3	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	8	1	3	8	0
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.4	6.8	7.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%
Vol Right, %	0%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	7	1	3	7	0
LT Vol	2	0	0	0	7	0
Through Vol	0	7	1	0	0	0
RT Vol	0	0	0	3	0	0
Lane Flow Rate	2	8	1	3	8	0
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.003	0.01	0.001	0.003	0.011	0
Departure Headway (Hd)	5.05	4.55	4.553	3.853	5.059	4.559
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	712	790	789	932	711	0
Service Time	2.758	2.258	2.263	1.563	2.766	2.266
HCM Lane V/C Ratio	0.003	0.01	0.001	0.003	0.011	0
HCM Control Delay, s/veh	7.8	7.3	7.3	6.6	7.8	7.3
HCM Lane LOS	A	A	A	A	A	N
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	956	31	15	1583	7	89	8	3	12	14	249
Future Volume (vph)	111	956	31	15	1583	7	89	8	3	12	14	249
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1598	0
Flt Permitted	0.084			0.252			0.253			0.752		
Satd. Flow (perm)	156	3539	1583	469	5085	1583	471	1863	1583	1401	1598	0
Satd. Flow (RTOR)			99			99			95		271	
Lane Group Flow (vph)	121	1039	34	16	1721	8	97	9	3	13	286	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	28.0	70.0	70.0	28.0	70.0	70.0	40.0	40.0	40.0	40.0	40.0	
Total Split (%)	20.3%	50.7%	50.7%	20.3%	50.7%	50.7%	29.0%	29.0%	29.0%	29.0%	29.0%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	98.2	93.0	93.0	87.3	81.4	81.4	23.9	23.9	23.9	23.9	23.9	
Actuated g/C Ratio	0.71	0.67	0.67	0.63	0.59	0.59	0.17	0.17	0.17	0.17	0.17	
v/c Ratio	0.54	0.43	0.03	0.04	0.57	0.00	1.19	0.02	0.00	0.05	0.57	
Control Delay (s/veh)	19.3	13.1	0.0	8.5	20.1	0.0	209.6	42.7	0.0	43.6	10.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	19.3	13.1	0.0	8.5	20.1	0.0	209.6	42.7	0.0	43.6	10.9	
LOS	B	B	A	A	C	A	F	D	A	D	B	
Approach Delay (s/veh)		13.4			19.9			190.1			12.4	
Approach LOS		B			B			F			B	
Queue Length 50th (ft)	31	185	0	4	335	0	~101	7	0	10	11	
Queue Length 95th (ft)	83	359	0	13	478	0	#200	22	0	28	89	
Internal Link Dist (ft)		975			575			496			192	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	351	2386	1099	526	2997	974	109	432	440	324	578	
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	0.34	0.44	0.03	0.03	0.57	0.01	0.89	0.02	0.01	0.04	0.49	

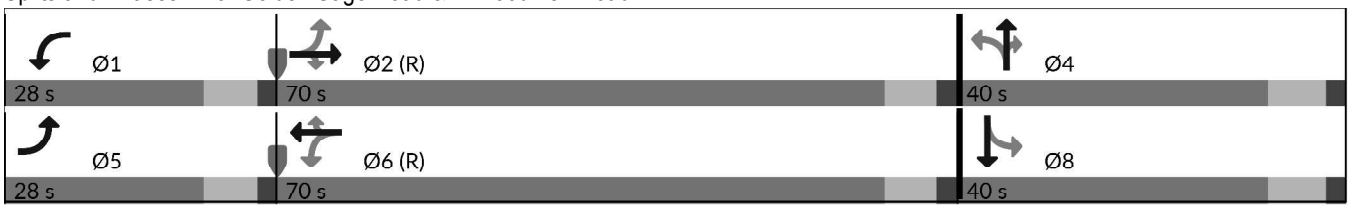
Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.20

Intersection Signal Delay (s/veh): 22.5	Intersection LOS: C
Intersection Capacity Utilization 85.4%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



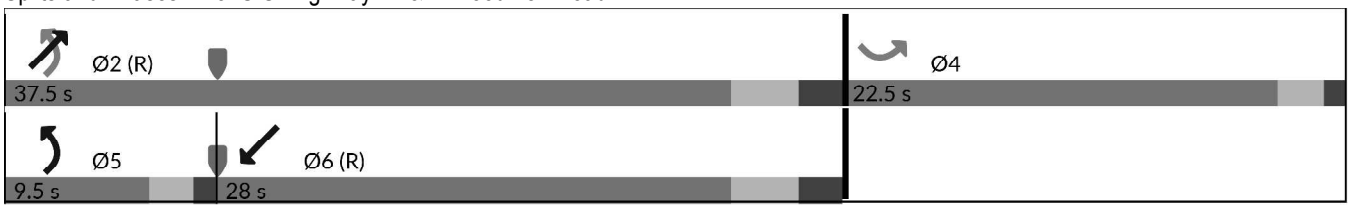
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	216	142	144	230	449	347
Future Volume (vph)	216	142	144	230	449	347
Satd. Flow (prot)	1770	1583	3433	1863	1863	1583
Flt Permitted	0.950		0.355			
Satd. Flow (perm)	1770	1583	1283	1863	1863	1583
Satd. Flow (RTOR)		154				377
Lane Group Flow (vph)	235	154	157	250	488	377
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	13.1	60.0	40.9	38.9	31.1	60.0
Actuated g/C Ratio	0.22	1.00	0.68	0.65	0.52	1.00
v/c Ratio	0.60	0.09	0.14	0.20	0.50	0.23
Control Delay (s/veh)	27.2	0.1	1.7	2.5	13.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.2	0.1	1.7	2.5	13.9	0.3
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	16.5			2.2	8.0	
Approach LOS	B			A	A	
Queue Length 50th (ft)	77	0	1	7	113	0
Queue Length 95th (ft)	124	0	4	14	234	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	575	1583	1116	1206	965	1583
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	0.41	0.10	0.14	0.21	0.51	0.24

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	403	729	11	282	37	37	282	11	59	578	6
Future Volume (vph)	10	403	729	11	282	37	37	282	11	59	578	6
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.565			0.406			0.271			0.516		
Satd. Flow (perm)	1052	3539	1583	756	3539	1583	505	1863	1583	961	1863	1583
Satd. Flow (RTOR)			551			236			145			145
Lane Group Flow (vph)	11	438	792	12	307	40	40	307	12	64	628	7
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	15.0		8.0	15.0		8.0	29.0	29.0	8.0	29.0	29.0
Total Split (%)	13.3%	25.0%		13.3%	25.0%		13.3%	48.3%	48.3%	13.3%	48.3%	48.3%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.5	11.5	60.0	14.5	11.5	60.0	37.0	31.5	31.5	37.8	33.4	33.4
Actuated g/C Ratio	0.24	0.19	1.00	0.24	0.19	1.00	0.62	0.53	0.53	0.63	0.56	0.56
v/c Ratio	0.03	0.64	0.50	0.04	0.45	0.02	0.09	0.31	0.01	0.09	0.60	0.00
Control Delay (s/veh)	15.2	28.0	1.1	15.3	23.8	0.0	5.3	11.3	0.0	2.5	15.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.2	28.0	1.1	15.3	23.8	0.0	5.3	11.3	0.0	2.5	15.1	0.0
LOS	B	C	A	B	C	A	A	B	A	A	B	A
Approach Delay (s/veh)		10.8			20.9			10.3			13.8	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	3	75	0	3	50	0	4	66	0	2	172	0
Queue Length 95th (ft)	12	#139	0	12	88	0	16	134	0	m6	#393	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	313	685	1583	267	685	1583	430	978	900	683	1038	946
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	0.04	0.64	0.50	0.04	0.45	0.03	0.09	0.31	0.01	0.09	0.61	0.01

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

Maximum v/c Ratio: 0.65

Intersection Signal Delay (s/veh): 12.9	Intersection LOS: B
Intersection Capacity Utilization 57.4%	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: 6: U.S. Highway 24 & Meridian Road

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	190	2	547	38	1	1391
Future Volume (vph)	190	2	547	38	1	1391
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.406	
Satd. Flow (perm)	1770	1583	1863	1583	756	1863
Satd. Flow (RTOR)				41		
Lane Group Flow (vph)	207	2	595	41	1	1512
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	22.5		117.5	117.5	117.5	117.5
Total Split (%)	16.1%		83.9%	83.9%	83.9%	83.9%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	17.8	140.0	113.2	113.2	113.2	113.2
Actuated g/C Ratio	0.13	1.00	0.81	0.81	0.81	0.81
v/c Ratio	0.92	0.00	0.39	0.03	0.00	1.00
Control Delay (s/veh)	102.4	0.0	6.1	0.7	3.0	38.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	102.4	0.0	6.1	0.7	3.0	38.5
LOS	F	A	A	A	A	D
Approach Delay (s/veh)	101.5		5.8			38.5
Approach LOS	F		A			D
Queue Length 50th (ft)	189	0	125	0	0	~1208
Queue Length 95th (ft)	#341	0	167	6	1	#1701
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	227	1583	1505	1287	611	1505
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	0.91	0.00	0.40	0.03	0.00	1.00

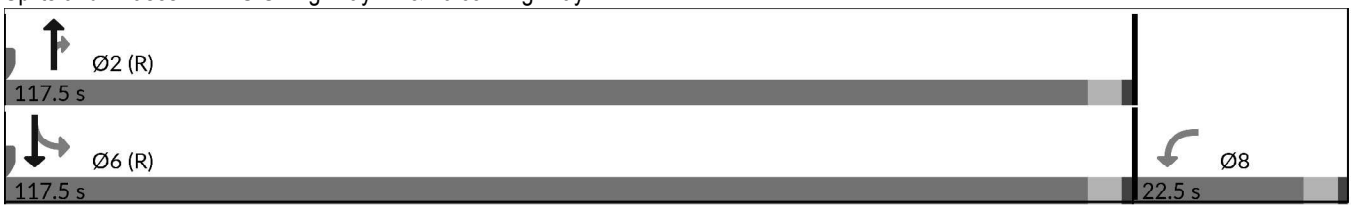
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay (s/veh): 35.2	Intersection LOS: D
Intersection Capacity Utilization 91.2%	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.

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	152	10	629	48	5	1514	
Future Volume (vph)	152	10	629	48	5	1514	
Satd. Flow (prot)	1765	0	3500	0	1770	1863	
Flt Permitted	0.955				0.329		
Satd. Flow (perm)	1765	0	3500	0	613	1863	
Satd. Flow (RTOR)	2		10				
Lane Group Flow (vph)	176	0	736	0	5	1646	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	35.0		90.0		15.0		105.0
Total Split (%)	25.0%		64.3%		10.7%		75%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	28.8		96.5		100.2	140.0	
Actuated g/C Ratio	0.21		0.69		0.72	1.00	
v/c Ratio	0.48		0.30		0.01	0.88	
Control Delay (s/veh)	53.3		9.3		6.8	3.5	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	53.3		9.3		6.8	3.5	
LOS	D		A		A	A	
Approach Delay (s/veh)	53.4		9.3			3.5	
Approach LOS	D		A			A	
Queue Length 50th (ft)	140		120		1	0	
Queue Length 95th (ft)	218		196		m1	m0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	373		2414		517	1861	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.47		0.30		0.01	0.88	

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

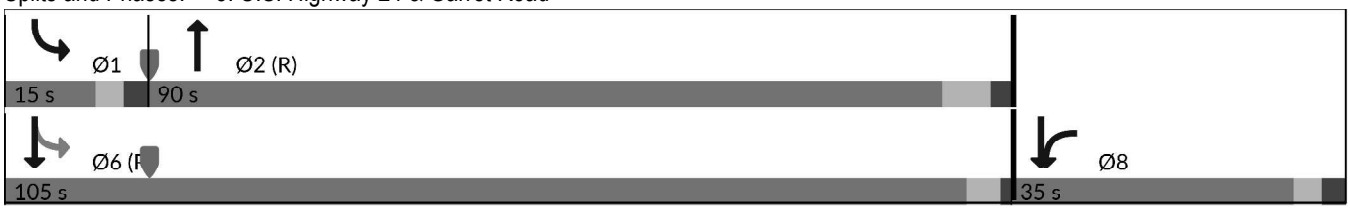
Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

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

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	201	165	52	400	1365	379
Future Volume (vph)	201	165	52	400	1365	379
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.105			
Satd. Flow (perm)	3433	1583	196	3539	3539	1583
Satd. Flow (RTOR)		179				412
Lane Group Flow (vph)	218	179	57	435	1484	412
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	9.1	60.0	41.9	41.9	35.3	60.0
Actuated g/C Ratio	0.15	1.00	0.70	0.70	0.59	1.00
v/c Ratio	0.41	0.11	0.19	0.17	0.71	0.26
Control Delay (s/veh)	25.1	0.1	10.9	10.7	14.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.1	0.1	10.9	10.7	14.0	0.3
LOS	C	A	B	B	B	A
Approach Delay (s/veh)	13.9			10.7	11.1	
Approach LOS	B			B	B	
Queue Length 50th (ft)	37	0	30	131	212	0
Queue Length 95th (ft)	61	0	63	182	#392	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	298	2471	2080	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.11	0.19	0.18	0.71	0.26

Intersection Summary

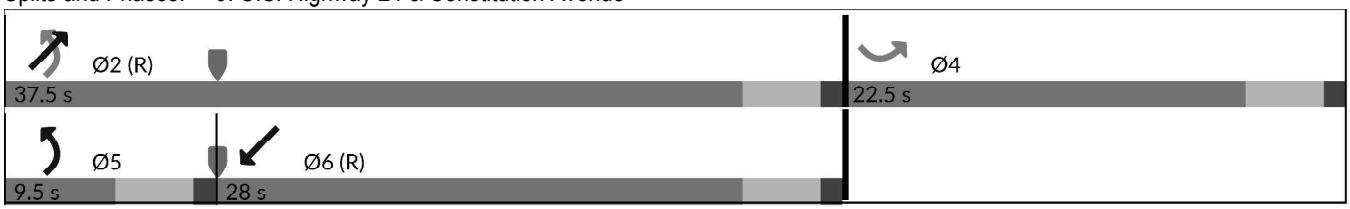
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 11.4	Intersection LOS: B
Intersection Capacity Utilization 56.4%	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.

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	1041	833	5	612	79	312	365	3	273	1233	14
Future Volume (vph)	10	1041	833	5	612	79	312	365	3	273	1233	14
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			602			145			145			145
Lane Group Flow (vph)	11	1132	905	5	665	86	339	397	3	297	1340	15
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	44.0		8.0	44.0		15.0	49.0		19.0	53.0	
Total Split (%)	6.7%	36.7%		6.7%	36.7%		12.5%	40.8%		15.8%	44.2%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	44.2	120.0	5.0	44.2	120.0	13.1	46.6	120.0	14.6	48.1	120.0
Actuated g/C Ratio	0.04	0.37	1.00	0.04	0.37	1.00	0.11	0.39	1.00	0.12	0.40	1.00
v/c Ratio	0.15	0.86	0.57	0.06	0.50	0.05	0.90	0.28	0.00	0.71	0.94	0.00
Control Delay (s/veh)	60.2	43.7	1.5	57.4	31.3	0.0	81.8	26.6	0.0	55.3	38.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.2	43.7	1.5	57.4	31.3	0.0	81.8	26.6	0.0	55.3	38.3	0.0
LOS	E	D	A	E	C	A	F	C	A	E	D	A
Approach Delay (s/veh)		25.1			28.0			51.8			41.0	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	8	407	0	4	200	0	137	113	0	124	325	0
Queue Length 95th (ft)	29	#608	0	18	286	0	#235	155	0	173	#654	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1304	1583	73	1304	1583	373	1373	1583	457	1419	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	0.87	0.57	0.07	0.51	0.05	0.91	0.29	0.00	0.65	0.94	0.01

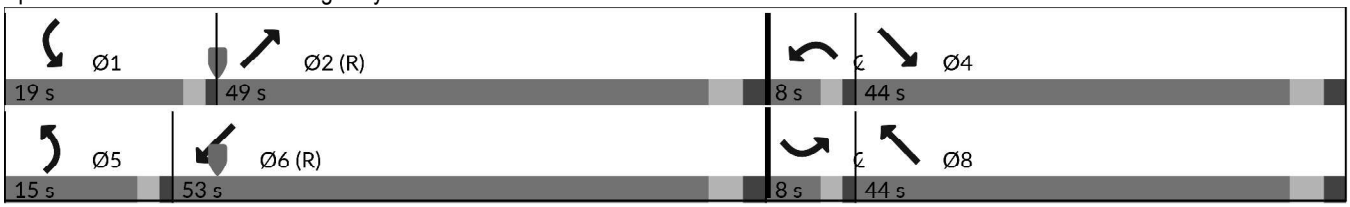
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 34.4	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: 10: U.S. Highway 24 & N Marksheffel Road



Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	72	65	4	5	31
Future Vol, veh/h	47	72	65	4	5	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	78	71	4	5	34
Number of Lanes	1	1	1	2	2	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	3	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay, s/veh	7.7	8.7	5.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	2	2	47	72	3	3	31
LT Vol	65	0	0	47	0	0	0	0
Through Vol	0	2	2	0	0	3	3	0
RT Vol	0	0	0	0	72	0	0	31
Lane Flow Rate	71	2	2	51	78	3	3	34
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.105	0.003	0.002	0.074	0.088	0.004	0.004	0.024
Departure Headway (Hd)	5.336	4.834	3.096	5.232	4.033	5.047	5.047	2.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	664	730	1129	678	877	713	713	1384
Service Time	3.132	2.63	0.89	3.012	1.814	2.747	2.747	0.303
HCM Lane V/C Ratio	0.107	0.003	0.002	0.075	0.089	0.004	0.004	0.025
HCM Control Delay, s/veh	8.8	7.6	5.9	8.4	7.2	7.8	7.8	5.4
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0	0.2	0.3	0	0	0.1

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	3	1	5
Future Vol, veh/h	0	1	1	3	1	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	1	3	1	5
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.3	6.8	6.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	100%	0%
Vol Thru, %	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	1	1	3	1	5
LT Vol	0	0	0	0	1	0
Through Vol	0	1	1	0	0	0
RT Vol	0	0	0	3	0	5
Lane Flow Rate	0	1	1	3	1	5
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0	0.001	0.001	0.003	0.002	0.006
Departure Headway (Hd)	4.548	4.548	4.546	3.846	5.044	3.844
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	791	791	935	714	937
Service Time	2.252	2.252	2.25	1.55	2.744	1.544
HCM Lane V/C Ratio	0	0.001	0.001	0.003	0.001	0.005
HCM Control Delay, s/veh	7.3	7.3	7.3	6.6	7.8	6.6
HCM Lane LOS	N	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	1454	108	41	1139	5	88	16	11	20	18	186
Future Volume (vph)	228	1454	108	41	1139	5	88	16	11	20	18	186
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1609	0
Flt Permitted	0.171			0.107			0.351			0.746		
Satd. Flow (perm)	319	3539	1583	199	5085	1583	654	1863	1583	1390	1609	0
Satd. Flow (RTOR)			113			99			95		202	
Lane Group Flow (vph)	248	1580	117	45	1238	5	96	17	12	22	222	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	28.0	70.0	70.0	28.0	70.0	70.0	40.0	40.0	40.0	40.0	40.0	
Total Split (%)	20.3%	50.7%	50.7%	20.3%	50.7%	50.7%	29.0%	29.0%	29.0%	29.0%	29.0%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	101.1	91.1	91.1	89.2	82.7	82.7	19.9	19.9	19.9	19.9	19.9	
Actuated g/C Ratio	0.73	0.66	0.66	0.65	0.60	0.60	0.14	0.14	0.14	0.14	0.14	
v/c Ratio	0.68	0.67	0.10	0.22	0.40	0.00	1.02	0.06	0.03	0.11	0.54	
Control Delay (s/veh)	17.4	18.4	2.6	10.0	16.6	0.0	155.7	47.3	0.2	48.7	13.8	
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)	17.4	18.4	2.6	10.0	16.6	0.0	155.7	47.3	0.2	48.7	13.8	
LOS	B	B	A	B	B	A	F	D	A	D	B	
Approach Delay (s/veh)		17.4			16.4			126.1			17.0	
Approach LOS		B			B			F			B	
Queue Length 50th (ft)	59	453	1	9	200	0	~89	13	0	17	16	
Queue Length 95th (ft)	129	668	29	26	320	0	#168	34	0	41	87	
Internal Link Dist (ft)		975			556			496			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	452	2336	1083	379	3045	988	151	432	440	322	528	
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	0.55	0.68	0.11	0.12	0.41	0.01	0.64	0.04	0.03	0.07	0.42	

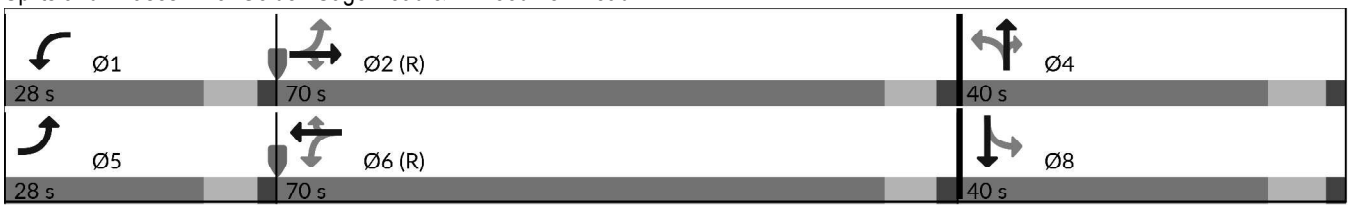
Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay (s/veh): 20.8	Intersection LOS: C
Intersection Capacity Utilization 88.5%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	527	175	333	477	343	409
Future Volume (vph)	527	175	333	477	343	409
Satd. Flow (prot)	1770	1583	3433	1863	1863	1583
Flt Permitted	0.950		0.337			
Satd. Flow (perm)	1770	1583	1218	1863	1863	1583
Satd. Flow (RTOR)		190				445
Lane Group Flow (vph)	573	190	362	518	373	445
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	29.0		8.0	31.0	23.0	
Total Split (%)	48.3%		13.3%	51.7%	38.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	23.1	60.0	30.9	28.9	19.7	60.0
Actuated g/C Ratio	0.39	1.00	0.52	0.48	0.33	1.00
v/c Ratio	0.84	0.12	0.42	0.57	0.61	0.28
Control Delay (s/veh)	29.0	0.1	8.0	12.9	23.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.0	0.1	8.0	12.9	23.0	0.4
LOS	C	A	A	B	C	A
Approach Delay (s/veh)	21.9			10.9	10.8	
Approach LOS	C			B	B	
Queue Length 50th (ft)	173	0	37	146	117	0
Queue Length 95th (ft)	#293	0	34	253	199	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	767	1583	855	896	610	1583
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	0.75	0.12	0.42	0.58	0.61	0.28

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 67.6%	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.

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	225	281	17	355	57	57	355	7	70	367	8
Future Volume (vph)	25	225	281	17	355	57	57	355	7	70	367	8
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.427			0.600			0.449			0.457		
Satd. Flow (perm)	795	3539	1583	1118	3539	1583	836	1863	1583	851	1863	1583
Satd. Flow (RTOR)			305			236			145			145
Lane Group Flow (vph)	27	245	305	18	386	62	62	386	8	76	399	9
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	16.0		8.0	16.0		8.0	28.0	28.0	8.0	28.0	28.0
Total Split (%)	13.3%	26.7%		13.3%	26.7%		13.3%	46.7%	46.7%	13.3%	46.7%	46.7%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	15.1	12.1	60.0	14.5	10.5	60.0	36.5	31.2	31.2	36.5	31.2	31.2
Actuated g/C Ratio	0.25	0.20	1.00	0.24	0.18	1.00	0.61	0.52	0.52	0.61	0.52	0.52
v/c Ratio	0.09	0.34	0.19	0.05	0.62	0.03	0.10	0.39	0.00	0.12	0.41	0.01
Control Delay (s/veh)	14.9	21.5	0.2	14.2	27.6	0.0	6.0	12.8	0.0	3.0	10.6	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)	14.9	21.5	0.2	14.2	27.6	0.0	6.0	12.8	0.0	3.0	10.6	0.0
LOS	B	C	A	B	C	A	A	B	A	A	B	A
Approach Delay (s/veh)		10.0			23.5			11.7			9.3	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	8	40	0	5	66	0	6	85	0	3	129	0
Queue Length 95th (ft)	20	71	0	16	107	0	23	178	0	m7	230	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	281	751	1583	324	656	1583	593	969	893	602	970	893
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	0.10	0.33	0.19	0.06	0.59	0.04	0.10	0.40	0.01	0.13	0.41	0.01

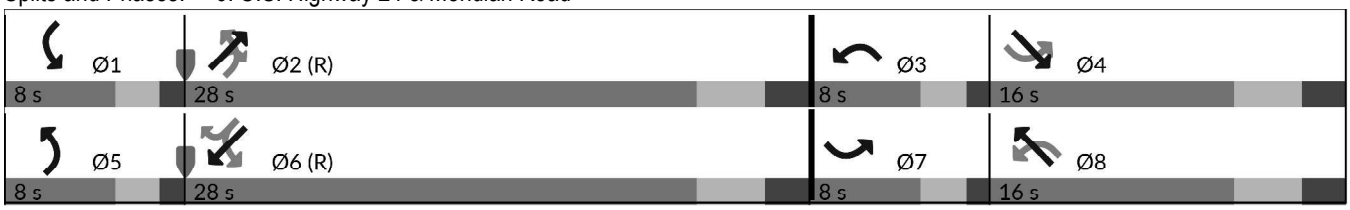
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay (s/veh): 13.4	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



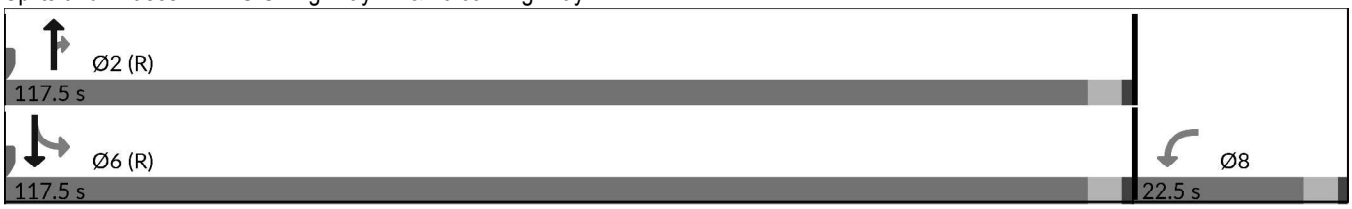
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	4	1294	66	1	709
Future Volume (vph)	60	4	1294	66	1	709
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.103	
Satd. Flow (perm)	1770	1583	1863	1583	192	1863
Satd. Flow (RTOR)		3		72		
Lane Group Flow (vph)	65	4	1407	72	1	771
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	22.5		117.5	117.5	117.5	117.5
Total Split (%)	16.1%		83.9%	83.9%	83.9%	83.9%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	10.5	140.0	123.6	123.6	123.6	123.6
Actuated g/C Ratio	0.08	1.00	0.88	0.88	0.88	0.88
v/c Ratio	0.49	0.00	0.85	0.05	0.00	0.46
Control Delay (s/veh)	73.9	0.0	12.9	0.4	2.0	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.9	0.0	12.9	0.4	2.0	3.3
LOS	E	A	B	A	A	A
Approach Delay (s/veh)	69.6		12.4			3.4
Approach LOS	E		B			A
Queue Length 50th (ft)	58	0	542	0	0	123
Queue Length 95th (ft)	106	0	1115	7	1	214
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	227	1583	1644	1406	169	1644
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.00	0.86	0.05	0.01	0.47

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	76	1	1391	217	11	782	
Future Volume (vph)	76	1	1391	217	11	782	
Satd. Flow (prot)	1772	0	3468	0	1770	1863	
Flt Permitted	0.953				0.095		
Satd. Flow (perm)	1772	0	3468	0	177	1863	
Satd. Flow (RTOR)			26				
Lane Group Flow (vph)	84	0	1748	0	12	850	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	25.0		100.0		15.0		115.0
Total Split (%)	17.9%		71.4%		10.7%		82%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	13.4		109.5		115.6	140.0	
Actuated g/C Ratio	0.10		0.78		0.83	1.00	
v/c Ratio	0.49		0.64		0.05	0.45	
Control Delay (s/veh)	69.1		9.3		3.3	0.8	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	69.1		9.3		3.3	0.8	
LOS	E		A		A	A	
Approach Delay (s/veh)	69.1		9.3			0.8	
Approach LOS	E		A			A	
Queue Length 50th (ft)	74		245		2	0	
Queue Length 95th (ft)	125		556		6	0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	246		2718		254	1849	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.34		0.64		0.05	0.46	

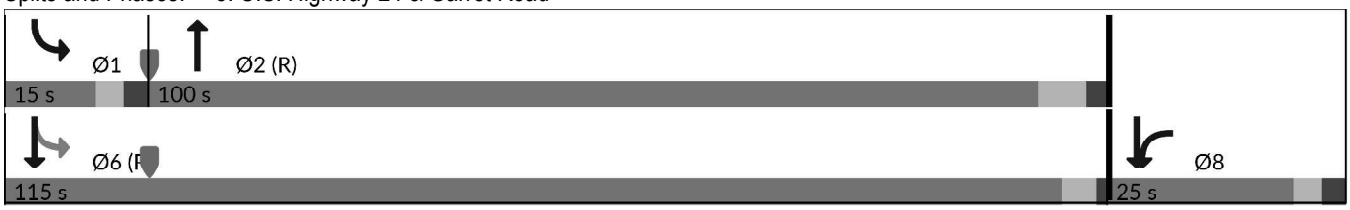
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay (s/veh): 8.5	Intersection LOS: A
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	322	95	99	1200	557	245
Future Volume (vph)	322	95	99	1200	557	245
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.340			
Satd. Flow (perm)	3433	1583	633	3539	3539	1583
Satd. Flow (RTOR)		103				266
Lane Group Flow (vph)	350	103	108	1304	605	266
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	11.4	60.0	39.6	39.6	30.2	60.0
Actuated g/C Ratio	0.19	1.00	0.66	0.66	0.50	1.00
v/c Ratio	0.53	0.06	0.19	0.55	0.33	0.16
Control Delay (s/veh)	24.7	0.0	5.4	7.2	11.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.7	0.0	5.4	7.2	11.1	0.2
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	19.2			7.1	7.8	
Approach LOS	B			A	A	
Queue Length 50th (ft)	59	0	25	205	68	0
Queue Length 95th (ft)	88	0	m49	293	120	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	548	2337	1783	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.07	0.20	0.56	0.34	0.17

Intersection Summary

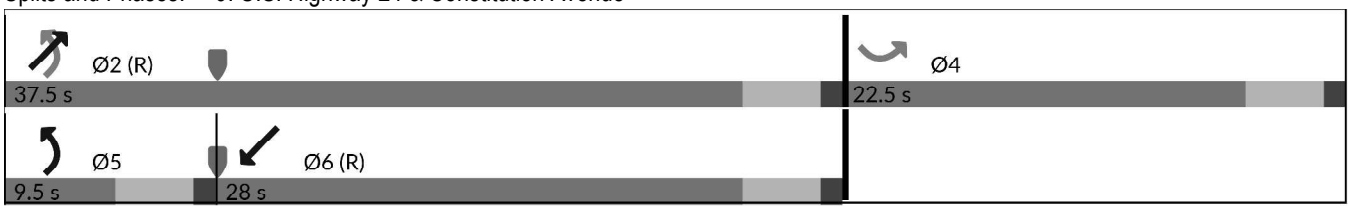
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay (s/veh): 9.3	Intersection LOS: A
Intersection Capacity Utilization 49.9%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	557	394	6	1073	200	777	1093	1	137	503	12
Future Volume (vph)	20	557	394	6	1073	200	777	1093	1	137	503	12
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			428			170			145			145
Lane Group Flow (vph)	22	605	428	7	1166	217	845	1188	1	149	547	13
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	49.0		8.0	49.0		36.0	53.0		10.0	27.0	
Total Split (%)	6.7%	40.8%		6.7%	40.8%		30.0%	44.2%		8.3%	22.5%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	46.2	120.0	5.0	43.0	120.0	32.0	51.5	120.0	7.7	27.2	120.0
Actuated g/C Ratio	0.04	0.39	1.00	0.04	0.36	1.00	0.27	0.43	1.00	0.06	0.23	1.00
v/c Ratio	0.30	0.44	0.27	0.09	0.91	0.13	0.92	0.78	0.00	0.67	0.68	0.00
Control Delay (s/veh)	66.6	28.4	0.4	58.3	49.2	0.1	58.9	34.7	0.0	65.2	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)	66.6	28.4	0.4	58.3	49.2	0.1	58.9	34.7	0.0	65.2	57.0	0.0
LOS	E	C	A	E	D	A	E	C	A	E	E	A
Approach Delay (s/veh)		17.8			41.6			44.8			57.7	
Approach LOS		B			D			D			E	
Queue Length 50th (ft)	17	165	0	5	445	0	325	431	0	52	208	0
Queue Length 95th (ft)	45	241	0	22	#575	0	#435	525	0	#102	#312	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1391	1583	73	1297	1583	944	1518	1583	220	801	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	0.30	0.43	0.27	0.10	0.90	0.14	0.90	0.78	0.00	0.68	0.68	0.01

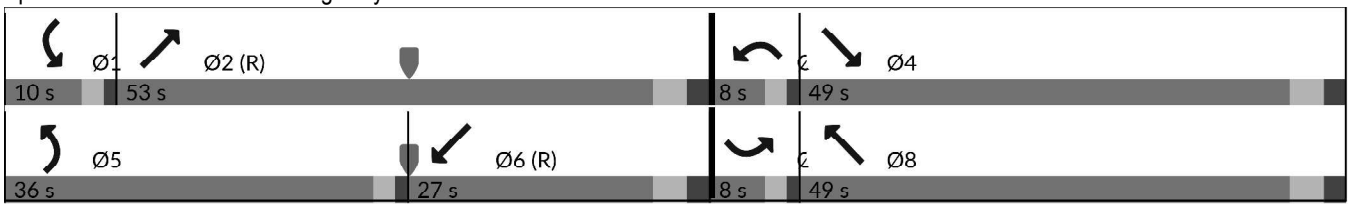
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 40.2	Intersection LOS: D
Intersection Capacity Utilization 77.4%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	45	207	6	55	0	268	33	0	0	53	168
Future Volume (vph)	87	45	207	6	55	0	268	33	0	0	53	168
Satd. Flow (prot)	1770	3539	1583	3433	3539	1863	1770	3539	1863	3614	3539	1583
Flt Permitted	0.469			0.950			0.629					
Satd. Flow (perm)	874	3539	1583	3433	3539	1863	1172	3539	1863	3614	3539	1583
Satd. Flow (RTOR)			225									264
Lane Group Flow (vph)	95	49	225	7	60	0	291	36	0	0	58	183
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		2			6
Detector Phase	7	4	4	3	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)	8.0	10.5	10.5	8.0	10.5	10.5	8.0	10.5	10.5	8.0	10.5	10.5
Total Split (s)	13.0	17.0	17.0	8.0	12.0	12.0	12.0	27.0	27.0	8.0	23.0	23.0
Total Split (%)	21.7%	28.3%	28.3%	13.3%	20.0%	20.0%	20.0%	45.0%	45.0%	13.3%	38.3%	38.3%
Yellow Time (s)	2.0	3.5	3.5	2.0	3.5	3.5	2.0	3.5	3.5	2.0	3.5	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	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)	16.1	12.0	12.0	5.0	6.2		37.9	35.4			23.9	23.9
Actuated g/C Ratio	0.27	0.20	0.20	0.08	0.10		0.63	0.59			0.40	0.40
v/c Ratio	0.26	0.06	0.45	0.02	0.16		0.35	0.01			0.04	0.23
Control Delay (s/veh)	16.3	18.0	6.6	25.5	25.4		7.8	7.4			9.9	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	16.3	18.0	6.6	25.5	25.4		7.8	7.4			9.9	6.5
LOS	B	B	A	C	C		A	A			A	A
Approach Delay (s/veh)		10.7			25.5			7.8			7.4	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	24	6	0	1	10		49	3			16	74
Queue Length 95th (ft)	49	20	49	6	25		94	9			m23	m93
Internal Link Dist (ft)		1504			652			1572			381	
Turn Bay Length (ft)	150		150	150			150					150
Base Capacity (vph)	395	847	550	286	388		832	2087			1407	788
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.24	0.06	0.41	0.02	0.15		0.35	0.02			0.04	0.23

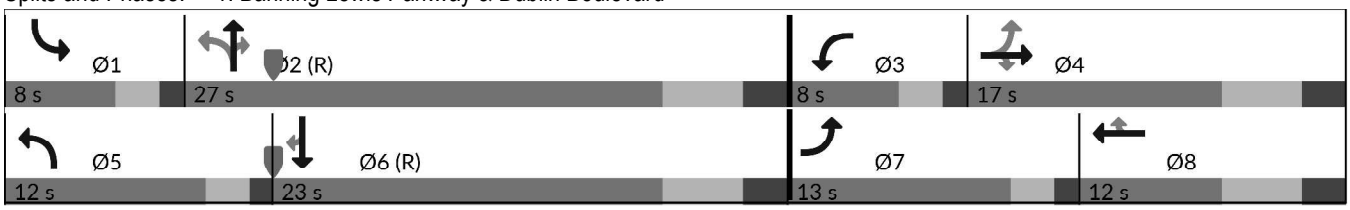
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay (s/veh): 9.9	Intersection LOS: A
Intersection Capacity Utilization 42.2%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 1: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	9	1	4	9	0
Future Vol, veh/h	3	9	1	4	9	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	10	1	4	10	0
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.4	6.7	7.9
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%
Vol Right, %	0%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	9	1	4	9	0
LT Vol	3	0	0	0	9	0
Through Vol	0	9	1	0	0	0
RT Vol	0	0	0	4	0	0
Lane Flow Rate	3	10	1	4	10	0
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.005	0.012	0.001	0.005	0.014	0
Departure Headway (Hd)	5.055	4.555	4.558	3.858	5.066	4.566
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	711	789	788	930	709	0
Service Time	2.765	2.265	2.271	1.571	2.778	2.278
HCM Lane V/C Ratio	0.004	0.013	0.001	0.004	0.014	0
HCM Control Delay, s/veh	7.8	7.3	7.3	6.6	7.9	7.3
HCM Lane LOS	A	A	A	A	A	N
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	1293	52	45	2046	47	130	10	42	72	18	369
Future Volume (vph)	177	1293	52	45	2046	47	130	10	42	72	18	369
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1863	1583	1770	1596	0
Flt Permitted	0.057			0.147			0.244			0.750		
Satd. Flow (perm)	106	5085	1583	274	5085	1583	455	1863	1583	1397	1596	0
Satd. Flow (RTOR)			99			99			95		68	
Lane Group Flow (vph)	192	1405	57	49	2224	51	141	11	46	78	421	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	19.0	77.4	77.4	11.6	70.0	70.0	49.0	49.0	49.0	49.0	49.0	
Total Split (%)	13.8%	56.1%	56.1%	8.4%	50.7%	50.7%	35.5%	35.5%	35.5%	35.5%	35.5%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	81.4	72.2	72.2	66.6	62.5	62.5	41.0	41.0	41.0	41.0	41.0	
Actuated g/C Ratio	0.59	0.52	0.52	0.48	0.45	0.45	0.30	0.30	0.30	0.30	0.30	
v/c Ratio	0.95	0.52	0.06	0.27	0.96	0.06	1.04	0.01	0.08	0.18	0.80	
Control Delay (s/veh)	88.2	23.0	0.5	17.0	49.1	0.1	136.8	34.6	0.3	37.6	50.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	88.2	23.0	0.5	17.0	49.1	0.1	136.8	34.6	0.3	37.6	50.6	
LOS	F	C	A	B	D	A	F	C	A	D	D	
Approach Delay (s/veh)		29.8			47.4			99.5			48.6	
Approach LOS		C			D			F			D	
Queue Length 50th (ft)	123	306	0	18	698	0	~137	7	0	52	299	
Queue Length 95th (ft)	#279	352	4	36	#822	1	#278	23	0	96	#463	
Internal Link Dist (ft)		975			536			496			176	
Turn Bay Length (ft)	300		395	300		385	120		190	115		
Base Capacity (vph)	201	2661	875	176	2302	771	135	553	537	415	521	
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	0.53	0.07	0.28	0.97	0.07	1.04	0.02	0.09	0.19	0.81	

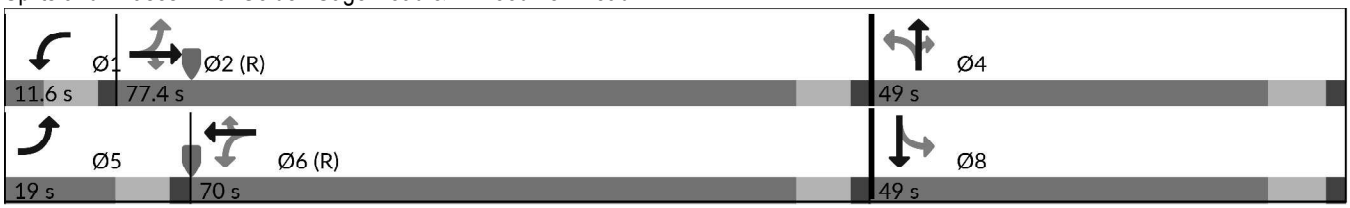
Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay (s/veh): 43.5	Intersection LOS: D
Intersection Capacity Utilization 106.1%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	270	178	180	288	562	434
Future Volume (vph)	270	178	180	288	562	434
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.350			
Satd. Flow (perm)	1770	1583	1265	3539	3539	1583
Satd. Flow (RTOR)		193				472
Lane Group Flow (vph)	293	193	196	313	611	472
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	25.0		8.0	35.0	27.0	
Total Split (%)	41.7%		13.3%	58.3%	45.0%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	15.1	60.0	38.9	36.9	27.4	60.0
Actuated g/C Ratio	0.25	1.00	0.65	0.62	0.46	1.00
v/c Ratio	0.65	0.12	0.18	0.14	0.37	0.29
Control Delay (s/veh)	26.7	0.1	2.2	2.4	12.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.7	0.1	2.2	2.4	12.6	0.4
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	16.2			2.4	7.3	
Approach LOS	B			A	A	
Queue Length 50th (ft)	95	0	2	4	72	0
Queue Length 95th (ft)	144	0	6	10	127	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	649	1583	1053	2175	1617	1583
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	0.12	0.19	0.14	0.38	0.30

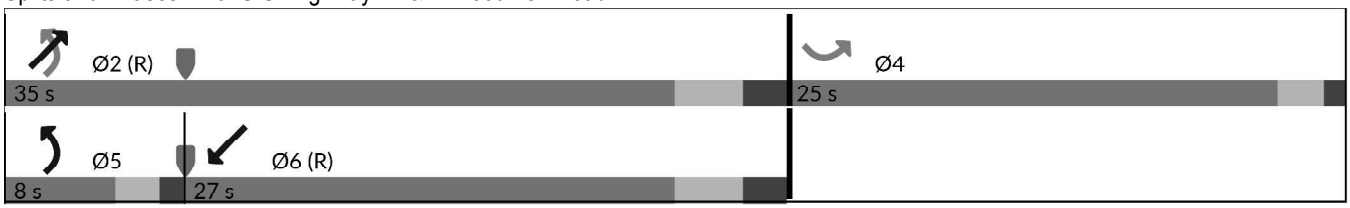
Intersection Summary

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

Maximum v/c Ratio: 0.66

Intersection Signal Delay (s/veh): 8.2	Intersection LOS: A
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	505	913	14	353	46	46	353	14	74	724	8
Future Volume (vph)	13	505	913	14	353	46	46	353	14	74	724	8
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.492			0.321			0.284			0.520		
Satd. Flow (perm)	916	3539	1583	598	3539	1583	529	3539	1583	969	3539	1583
Satd. Flow (RTOR)			514			236			145			145
Lane Group Flow (vph)	14	549	992	15	384	50	50	384	15	80	787	9
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	15.0		8.0	15.0		8.0	29.0	29.0	8.0	29.0	29.0
Total Split (%)	13.3%	25.0%		13.3%	25.0%		13.3%	48.3%	48.3%	13.3%	48.3%	48.3%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.7	13.7	60.0	16.7	13.7	60.0	34.8	29.2	29.2	35.0	29.4	29.4
Actuated g/C Ratio	0.28	0.23	1.00	0.28	0.23	1.00	0.58	0.49	0.49	0.58	0.49	0.49
v/c Ratio	0.04	0.67	0.62	0.05	0.47	0.03	0.11	0.22	0.01	0.12	0.45	0.01
Control Delay (s/veh)	14.5	28.3	1.8	14.7	22.5	0.0	6.0	10.7	0.0	3.6	12.8	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)	14.5	28.3	1.8	14.7	22.5	0.0	6.0	10.7	0.0	3.6	12.8	0.0
LOS	B	C	A	B	C	A	A	B	A	A	B	A
Approach Delay (s/veh)		11.3			19.8			9.9			11.9	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)	4	91	0	4	60	0	6	45	0	7	143	0
Queue Length 95th (ft)	14	#191	0	14	109	0	19	74	0	8	210	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	326	808	1583	264	808	1583	426	1724	845	645	1731	848
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	0.04	0.68	0.63	0.06	0.48	0.03	0.12	0.22	0.02	0.12	0.45	0.01

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay (s/veh): 12.4	Intersection LOS: B
Intersection Capacity Utilization 49.8%	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: 6: U.S. Highway 24 & Meridian Road

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	238	3	685	48	1	1741
Future Volume (vph)	238	3	685	48	1	1741
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.358	
Satd. Flow (perm)	1770	1583	3539	1583	667	3539
Satd. Flow (RTOR)		1		52		
Lane Group Flow (vph)	259	3	745	52	1	1892
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	23.0		117.0	117.0	117.0	117.0
Total Split (%)	16.4%		83.6%	83.6%	83.6%	83.6%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	18.5	140.0	112.5	112.5	112.5	112.5
Actuated g/C Ratio	0.13	1.00	0.80	0.80	0.80	0.80
v/c Ratio	1.11	0.00	0.26	0.04	0.00	0.66
Control Delay (s/veh)	146.2	0.0	3.6	0.7	3.0	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	146.2	0.0	3.6	0.7	3.0	7.2
LOS	F	A	A	A	A	A
Approach Delay (s/veh)	144.6		3.5			7.2
Approach LOS	F		A			A
Queue Length 50th (ft)	~268	0	74	0	0	320
Queue Length 95th (ft)	#448	0	91	8	1	374
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	233	1583	2843	1282	535	2843
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	1.11	0.00	0.26	0.04	0.00	0.67

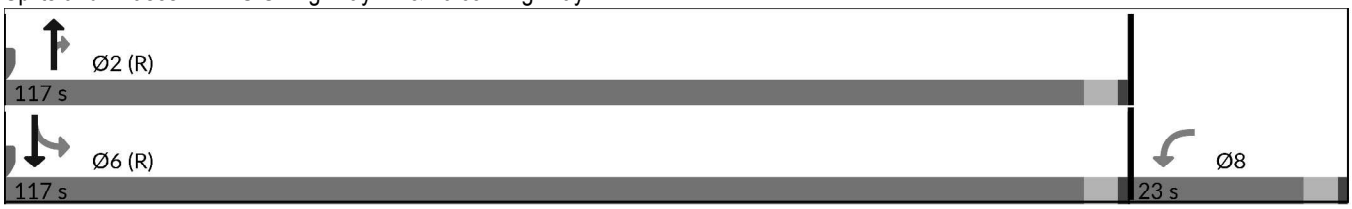
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
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: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	190	13	788	60	6	1896	
Future Volume (vph)	190	13	788	60	6	1896	
Satd. Flow (prot)	1763	0	3500	0	1770	3539	
Flt Permitted	0.955				0.257		
Satd. Flow (perm)	1763	0	3500	0	479	3539	
Satd. Flow (RTOR)	2		10				
Lane Group Flow (vph)	221	0	922	0	7	2061	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	40.0		90.4		9.6		100.0
Total Split (%)	28.6%		64.6%		6.9%		71%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	30.4		95.2		98.6	140.0	
Actuated g/C Ratio	0.22		0.68		0.70	1.00	
v/c Ratio	0.57		0.38		0.01	0.58	
Control Delay (s/veh)	54.1		11.0		7.5	0.7	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	54.1		11.0		7.5	0.7	
LOS	D		B		A	A	
Approach Delay (s/veh)	54.2		11.1			0.7	
Approach LOS	D		B			A	
Queue Length 50th (ft)	176		178		2	0	
Queue Length 95th (ft)	259		277		7	0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	435		2383		383	3524	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.51		0.39		0.02	0.58	

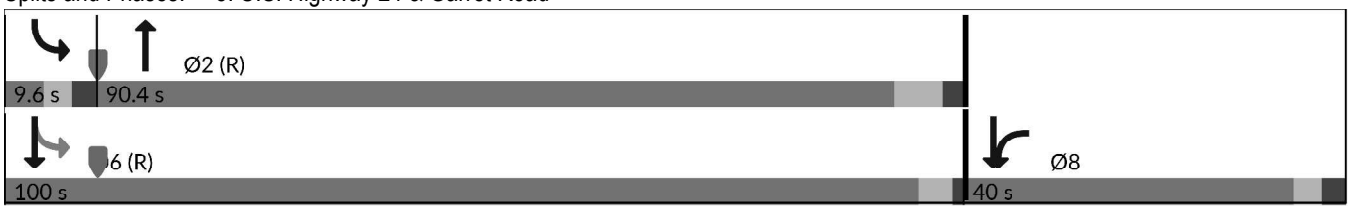
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay (s/veh): 7.4	Intersection LOS: A
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	252	207	65	501	1709	475
Future Volume (vph)	252	207	65	501	1709	475
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.109			
Satd. Flow (perm)	3433	1583	203	3539	3539	1583
Satd. Flow (RTOR)		225				516
Lane Group Flow (vph)	274	225	71	545	1858	516
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	10.1	60.0	40.9	40.9	34.2	60.0
Actuated g/C Ratio	0.17	1.00	0.68	0.68	0.57	1.00
v/c Ratio	0.47	0.14	0.23	0.22	0.92	0.32
Control Delay (s/veh)	25.0	0.1	13.2	6.0	26.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.0	0.1	13.2	6.0	26.0	0.5
LOS	C	A	B	A	C	A
Approach Delay (s/veh)	13.8			6.9	20.5	
Approach LOS	B			A	C	
Queue Length 50th (ft)	46	0	28	46	~396	0
Queue Length 95th (ft)	73	0	77	178	#571	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	304	2414	2014	1583
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	0.14	0.23	0.23	0.92	0.33

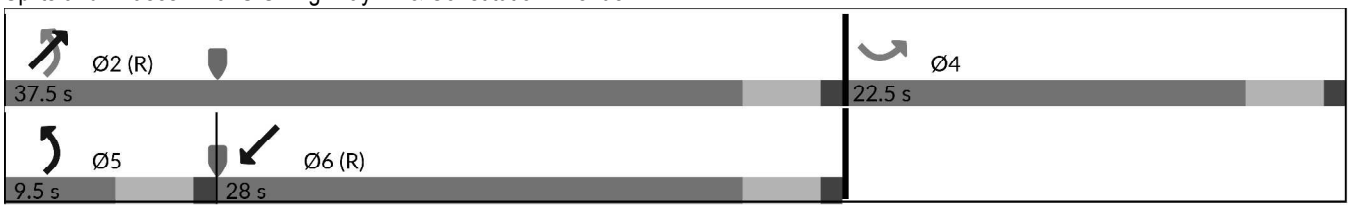
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 17.2	Intersection LOS: B
Intersection Capacity Utilization 68.7%	ICU Level of Service C
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: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	1300	1043	6	766	99	391	457	4	342	1594	18
Future Volume (vph)	13	1300	1043	6	766	99	391	457	4	342	1594	18
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			585			145			145			145
Lane Group Flow (vph)	14	1413	1134	7	833	108	425	497	4	372	1733	20
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	43.0		8.0	43.0		15.0	36.0		33.0	54.0	
Total Split (%)	6.7%	35.8%		6.7%	35.8%		12.5%	30.0%		27.5%	45.0%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	44.4	120.0	5.0	42.8	120.0	12.0	42.7	120.0	18.3	49.0	120.0
Actuated g/C Ratio	0.04	0.37	1.00	0.04	0.36	1.00	0.10	0.36	1.00	0.15	0.41	1.00
v/c Ratio	0.19	1.07	0.71	0.09	0.66	0.06	1.23	0.39	0.00	0.71	1.19	0.01
Control Delay (s/veh)	61.7	85.9	2.8	58.3	36.2	0.0	174.5	30.7	0.0	42.5	126.5	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)	61.7	85.9	2.8	58.3	36.2	0.0	174.5	30.7	0.0	42.5	126.5	0.0
LOS	E	F	A	E	D	A	F	C	A	D	F	A
Approach Delay (s/veh)		49.0			32.3			96.7			110.6	
Approach LOS		D			C			F			F	
Queue Length 50th (ft)	11	~623	0	5	271	0	~210	150	0	124	~840	0
Queue Length 95th (ft)	33	#862	0	22	378	0	#314	212	0	m126	m#958	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1309	1583	73	1262	1583	343	1259	1583	858	1445	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	0.19	1.08	0.72	0.10	0.66	0.07	1.24	0.39	0.00	0.43	1.20	0.01

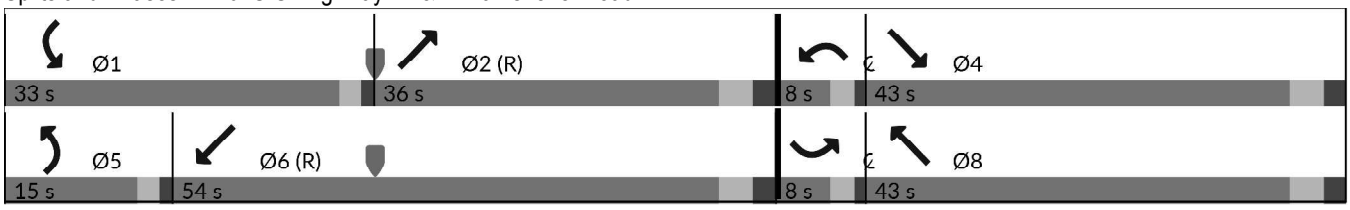
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay (s/veh): 73.3	Intersection LOS: E
Intersection Capacity Utilization 102.8%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1420	159	76	2456	13	191	415	83	19	383	96
Future Volume (vph)	64	1420	159	76	2456	13	191	415	83	19	383	96
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	70	1543	173	83	2670	14	208	451	90	21	416	104
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	68.7		14.3	70.5		15.0	24.0		13.0	22.0	
Total Split (%)	10.4%	57.3%		11.9%	58.8%		12.5%	20.0%		10.8%	18.3%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	5.0	64.1	120.0	6.7	65.5	120.0	7.0	23.8	120.0	5.0	14.0	120.0
Actuated g/C Ratio	0.04	0.53	1.00	0.06	0.55	1.00	0.06	0.20	1.00	0.04	0.12	1.00
v/c Ratio	0.48	0.56	0.10	0.43	0.96	0.00	1.04	0.64	0.05	0.14	1.00	0.06
Control Delay (s/veh)	68.1	20.3	0.1	62.2	37.3	0.0	129.0	52.2	0.0	57.8	99.5	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)	68.1	20.3	0.1	62.2	37.3	0.0	129.0	52.2	0.0	57.8	99.5	0.0
LOS	E	C	A	E	D	A	F	D	A	E	F	A
Approach Delay (s/veh)		20.3			37.9			67.3			78.8	
Approach LOS		C			D			E			E	
Queue Length 50th (ft)	27	297	0	32	~730	0	~90	165	0	8	~173	0
Queue Length 95th (ft)	53	345	0	59	#878	0	#172	#293	0	22	#283	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	143	2714	1583	194	2775	1583	200	701	1583	143	412	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	0.49	0.57	0.11	0.43	0.96	0.01	1.04	0.64	0.06	0.15	1.01	0.07

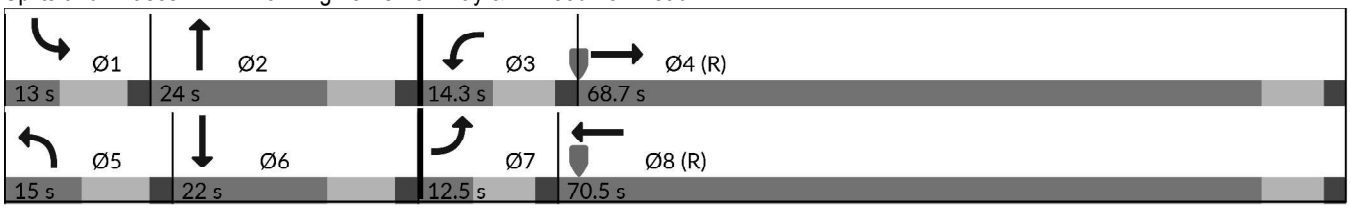
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay (s/veh): 40.1	Intersection LOS: D
Intersection Capacity Utilization 83.1%	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.

Splits and Phases: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	66	264	21	39	0	202	50	0	0	32	74
Future Volume (vph)	152	66	264	21	39	0	202	50	0	0	32	74
Satd. Flow (prot)	1770	3539	1583	3433	3539	1863	1770	3539	1863	3614	3539	1583
Flt Permitted	0.513			0.950			0.650					
Satd. Flow (perm)	956	3539	1583	3433	3539	1863	1211	3539	1863	3614	3539	1583
Satd. Flow (RTOR)			287									209
Lane Group Flow (vph)	165	72	287	23	42	0	220	54	0	0	35	80
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8	2		2			6
Detector Phase	7	4	4	3	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)	8.0	10.5	10.5	8.0	10.5	10.5	8.0	10.5	10.5	8.0	10.5	10.5
Total Split (s)	9.0	22.0	22.0	8.0	21.0	21.0	14.0	22.0	22.0	8.0	16.0	16.0
Total Split (%)	15.0%	36.7%	36.7%	13.3%	35.0%	35.0%	23.3%	36.7%	36.7%	13.3%	26.7%	26.7%
Yellow Time (s)	2.0	3.5	3.5	2.0	3.5	3.5	2.0	3.5	3.5	2.0	3.5	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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)	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	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)	13.0	9.3	9.3	5.0	7.1		40.6	38.1			26.4	26.4
Actuated g/C Ratio	0.22	0.16	0.16	0.08	0.12		0.68	0.64			0.44	0.44
v/c Ratio	0.54	0.13	0.58	0.08	0.09		0.24	0.02			0.02	0.09
Control Delay (s/veh)	25.1	20.6	8.4	26.1	22.7		5.9	6.3			7.3	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay (s/veh)	25.1	20.6	8.4	26.1	22.7		5.9	6.3			7.3	2.4
LOS	C	C	A	C	C		A	A			A	A
Approach Delay (s/veh)		15.4			24.0			6.0			3.9	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	57	12	0	4	7		16	2			1	0
Queue Length 95th (ft)	76	25	53	13	17		76	13			m11	m16
Internal Link Dist (ft)		1504			732			1572			381	
Turn Bay Length (ft)	150		150	150			150					150
Base Capacity (vph)	303	973	643	286	914		925	2247			1554	812
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.54	0.07	0.45	0.08	0.05		0.24	0.02			0.02	0.10

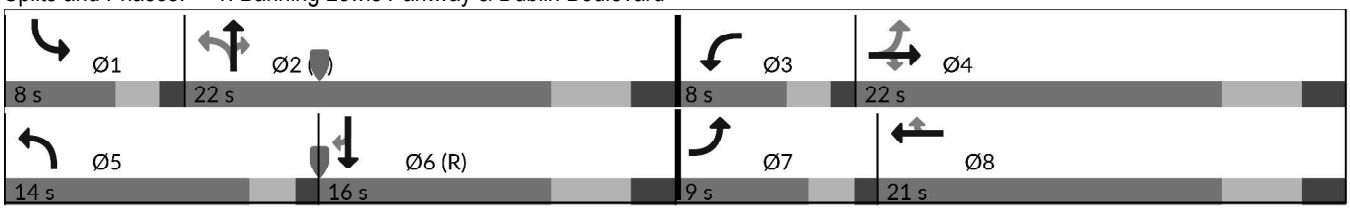
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 12.0	Intersection LOS: B
Intersection Capacity Utilization 42.1%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 1: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	4	1	6
Future Vol, veh/h	0	1	1	4	1	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	1	4	1	7
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.3	6.7	6.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	100%	0%
Vol Thru, %	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	1	1	4	1	6
LT Vol	0	0	0	0	1	0
Through Vol	0	1	1	0	0	0
RT Vol	0	0	0	4	0	6
Lane Flow Rate	0	1	1	4	1	7
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0	0.001	0.001	0.005	0.002	0.007
Departure Headway (Hd)	4.55	4.55	4.548	3.848	5.046	3.846
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	790	791	935	713	936
Service Time	2.255	2.255	2.252	1.552	2.748	1.547
HCM Lane V/C Ratio	0	0.001	0.001	0.004	0.001	0.007
HCM Control Delay, s/veh	7.3	7.3	7.3	6.6	7.8	6.6
HCM Lane LOS	N	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1922	162	95	1562	87	131	20	55	86	25	294
Future Volume (vph)	366	1922	162	95	1562	87	131	20	55	86	25	294
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1863	1583	1770	1606	0
Flt Permitted	0.068			0.078			0.302			0.743		
Satd. Flow (perm)	127	5085	1583	145	5085	1583	563	1863	1583	1384	1606	0
Satd. Flow (RTOR)			176			158			154		309	
Lane Group Flow (vph)	398	2089	176	103	1698	95	142	22	60	93	347	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	35.2	78.2	78.2	15.8	58.8	58.8	44.0	44.0	44.0	44.0	44.0	
Total Split (%)	25.5%	56.7%	56.7%	11.4%	42.6%	42.6%	31.9%	31.9%	31.9%	31.9%	31.9%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	86.5	71.1	71.1	59.2	51.3	51.3	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.63	0.52	0.52	0.43	0.37	0.37	0.26	0.26	0.26	0.26	0.26	
v/c Ratio	0.97	0.79	0.19	0.66	0.89	0.13	0.97	0.04	0.11	0.25	0.53	
Control Delay (s/veh)	79.9	30.5	2.9	48.2	48.4	0.4	118.2	38.6	0.4	42.7	10.0	
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)	79.9	30.5	2.9	48.2	48.4	0.4	118.2	38.6	0.4	42.7	10.0	
LOS	E	C	A	D	D	A	F	D	A	D	B	
Approach Delay (s/veh)		36.1			46.0			78.9			17.0	
Approach LOS		D			D			E			B	
Queue Length 50th (ft)	305	553	0	39	523	0	127	15	0	66	26	
Queue Length 95th (ft)	#517	617	37	#114	591	1	#269	38	0	118	117	
Internal Link Dist (ft)		975			586			496			185	
Turn Bay Length (ft)	300		395	300		385	120		190	115		
Base Capacity (vph)	409	2620	900	160	1890	687	146	486	526	361	647	
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	0.97	0.80	0.20	0.64	0.90	0.14	0.97	0.05	0.11	0.26	0.54	

Intersection Summary

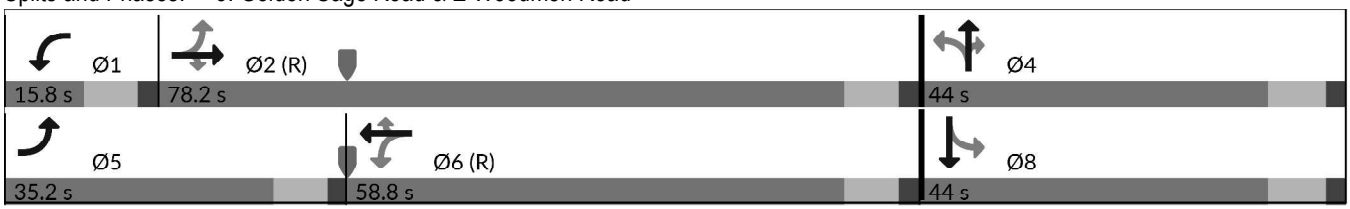
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 39.9	Intersection LOS: D
Intersection Capacity Utilization 103.0%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	660	219	417	597	429	512
Future Volume (vph)	660	219	417	597	429	512
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.331			
Satd. Flow (perm)	1770	1583	1196	3539	3539	1583
Satd. Flow (RTOR)		219				557
Lane Group Flow (vph)	717	238	453	649	466	557
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	34.0		9.0	26.0	17.0	
Total Split (%)	56.7%		15.0%	43.3%	28.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	28.2	60.0	25.8	23.8	13.6	60.0
Actuated g/C Ratio	0.47	1.00	0.43	0.40	0.23	1.00
v/c Ratio	0.86	0.15	0.58	0.46	0.58	0.35
Control Delay (s/veh)	26.0	0.2	12.6	12.1	24.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	0.2	12.6	12.1	24.8	0.6
LOS	C	A	B	B	C	A
Approach Delay (s/veh)	19.6			12.4	11.6	
Approach LOS	B			B	B	
Queue Length 50th (ft)	198	0	61	100	82	0
Queue Length 95th (ft)	#385	0	58	138	126	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	914	1583	779	1401	803	1583
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	0.78	0.15	0.58	0.46	0.58	0.35

Intersection Summary

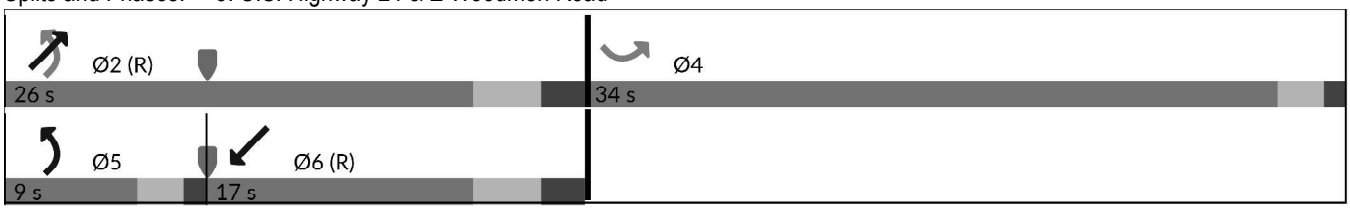
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 14.4	Intersection LOS: B
Intersection Capacity Utilization 71.2%	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.

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	31	282	352	21	444	71	71	444	9	88	459	10
Future Volume (vph)	31	282	352	21	444	71	71	444	9	88	459	10
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.357			0.565			0.469			0.434		
Satd. Flow (perm)	665	3539	1583	1052	3539	1583	874	3539	1583	808	3539	1583
Satd. Flow (RTOR)			383			236			145			145
Lane Group Flow (vph)	34	307	383	23	483	77	77	483	10	96	499	11
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	20.0		8.0	20.0		8.0	24.0	24.0	8.0	24.0	24.0
Total Split (%)	13.3%	33.3%		13.3%	33.3%		13.3%	40.0%	40.0%	13.3%	40.0%	40.0%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	17.5	14.5	60.0	16.9	12.9	60.0	33.4	26.8	26.8	34.1	28.7	28.7
Actuated g/C Ratio	0.29	0.24	1.00	0.28	0.22	1.00	0.56	0.45	0.45	0.57	0.48	0.48
v/c Ratio	0.11	0.35	0.24	0.06	0.63	0.04	0.13	0.30	0.01	0.17	0.29	0.01
Control Delay (s/veh)	13.0	19.5	0.3	12.1	25.1	0.0	7.7	13.4	0.0	4.2	9.5	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)	13.0	19.5	0.3	12.1	25.1	0.0	7.7	13.4	0.0	4.2	9.5	0.4
LOS	B	B	A	B	C	A	A	B	A	A	A	A
Approach Delay (s/veh)		9.1			21.3			12.5			8.6	
Approach LOS		A			C			B			A	
Queue Length 50th (ft)	9	50	0	6	83	0	9	55	0	3	17	0
Queue Length 95th (ft)	21	78	0	16	121	0	33	108	0	m11	142	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	286	975	1583	356	884	1583	569	1583	788	551	1694	833
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	0.31	0.24	0.06	0.55	0.05	0.14	0.31	0.01	0.17	0.29	0.01

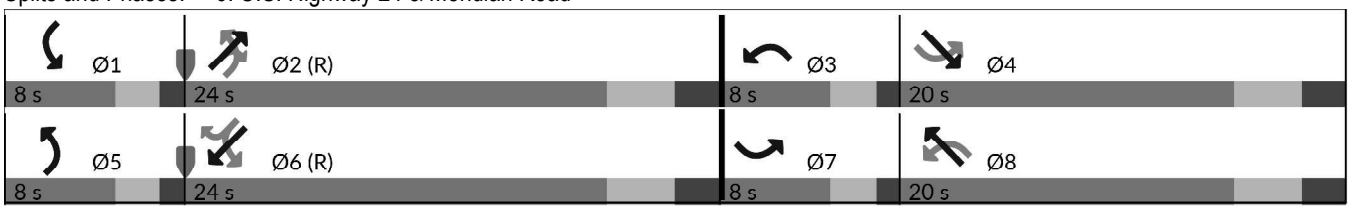
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 12.6	Intersection LOS: B
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



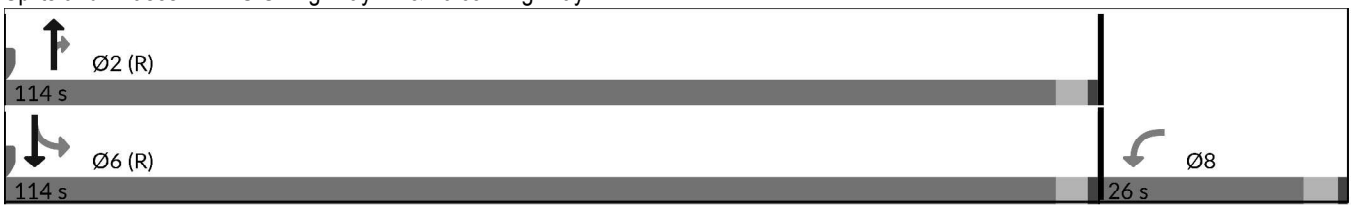
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	75	5	1620	82	1	888
Future Volume (vph)	75	5	1620	82	1	888
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.113	
Satd. Flow (perm)	1770	1583	3539	1583	210	3539
Satd. Flow (RTOR)		3		89		
Lane Group Flow (vph)	82	5	1761	89	1	965
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	26.0		114.0	114.0	114.0	114.0
Total Split (%)	18.6%		81.4%	81.4%	81.4%	81.4%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	11.8	140.0	119.2	119.2	119.2	119.2
Actuated g/C Ratio	0.08	1.00	0.85	0.85	0.85	0.85
v/c Ratio	0.55	0.00	0.58	0.06	0.00	0.32
Control Delay (s/veh)	74.5	0.0	4.2	0.5	2.0	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.5	0.0	4.2	0.5	2.0	2.6
LOS	E	A	A	A	A	A
Approach Delay (s/veh)	70.2		4.1			2.6
Approach LOS	E		A			A
Queue Length 50th (ft)	73	0	190	0	0	71
Queue Length 95th (ft)	126	0	291	9	1	113
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	271	1583	3012	1360	178	3012
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.00	0.58	0.07	0.01	0.32

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
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: 0.58

Intersection Signal Delay (s/veh): 5.6	Intersection LOS: A
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	95	1	1742	272	14	976	
Future Volume (vph)	95	1	1742	272	14	976	
Satd. Flow (prot)	1773	0	3468	0	1770	3539	
Flt Permitted	0.953				0.043		
Satd. Flow (perm)	1773	0	3468	0	80	3539	
Satd. Flow (RTOR)			34				
Lane Group Flow (vph)	104	0	2189	0	15	1061	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	20.0		110.2		9.8		120.0
Total Split (%)	14.3%		78.7%		7.0%		86%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	13.2		110.3		115.8	140.0	
Actuated g/C Ratio	0.09		0.79		0.83	1.00	
v/c Ratio	0.62		0.79		0.12	0.29	
Control Delay (s/veh)	77.1		12.4		4.3	0.2	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	77.1		12.4		4.3	0.2	
LOS	E		B		A	A	
Approach Delay (s/veh)	77.2		12.4			0.3	
Approach LOS	E		B			A	
Queue Length 50th (ft)	92		447		2	0	
Queue Length 95th (ft)	156		777		6	0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	183		2740		123	3522	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.57		0.80		0.12	0.30	

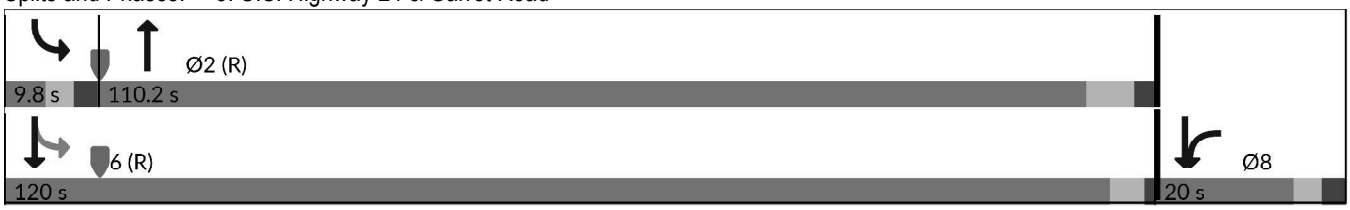
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 10.6	Intersection LOS: B
Intersection Capacity Utilization 72.6%	ICU Level of Service C
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	403	119	24	1502	697	307
Future Volume (vph)	403	119	24	1502	697	307
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.280			
Satd. Flow (perm)	3433	1583	522	3539	3539	1583
Satd. Flow (RTOR)		129				334
Lane Group Flow (vph)	438	129	26	1633	758	334
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	12.8	60.0	38.2	38.2	33.8	60.0
Actuated g/C Ratio	0.21	1.00	0.64	0.64	0.56	1.00
v/c Ratio	0.59	0.08	0.05	0.72	0.37	0.21
Control Delay (s/veh)	24.4	0.1	6.3	16.1	9.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	0.1	6.3	16.1	9.8	0.3
LOS	C	A	A	B	A	A
Approach Delay (s/veh)	18.9			16.0	6.9	
Approach LOS	B			B	A	
Queue Length 50th (ft)	74	0	7	403	55	0
Queue Length 95th (ft)	105	0	m10	m374	154	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	454	2251	1996	1583
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	0.43	0.08	0.06	0.73	0.38	0.21

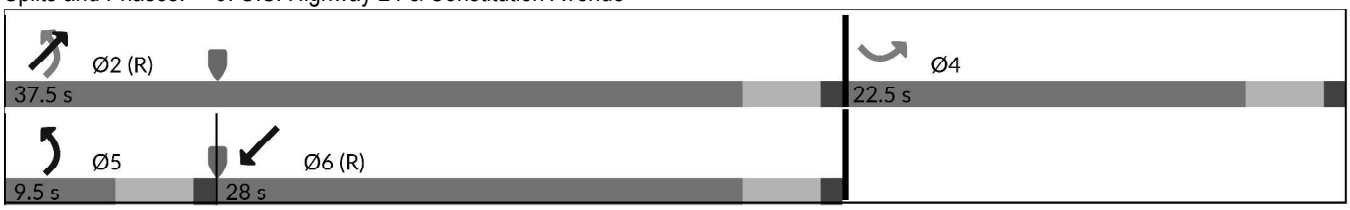
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 13.5	Intersection LOS: B
Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	697	493	8	1343	250	975	1368	1	172	630	15
Future Volume (vph)	25	697	493	8	1343	250	975	1368	1	172	630	15
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			536			170			145			145
Lane Group Flow (vph)	27	758	536	9	1460	272	1060	1487	1	187	685	16
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	47.0		8.0	47.0		35.0	51.0		14.0	30.0	
Total Split (%)	6.7%	39.2%		6.7%	39.2%		29.2%	42.5%		11.7%	25.0%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	48.4	120.0	5.0	45.2	120.0	32.0	46.6	120.0	10.4	25.0	120.0
Actuated g/C Ratio	0.04	0.40	1.00	0.04	0.38	1.00	0.27	0.39	1.00	0.09	0.21	1.00
v/c Ratio	0.36	0.53	0.33	0.12	1.09	0.17	1.15	1.08	0.00	0.62	0.92	0.01
Control Delay (s/veh)	70.3	29.3	0.5	59.2	91.2	0.2	123.4	85.7	0.0	55.8	69.5	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)	70.3	29.3	0.5	59.2	91.2	0.2	123.4	85.7	0.0	55.8	69.5	0.0
LOS	E	C	A	E	F	A	F	F	A	E	E	A
Approach Delay (s/veh)		18.5			76.9			101.4			65.4	
Approach LOS		B			E			F			E	
Queue Length 50th (ft)	21	225	0	7	~713	0	~500	~686	0	72	276	0
Queue Length 95th (ft)	53	320	0	25	#852	0	#631	#825	0	90	#392	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1427	1583	73	1332	1583	915	1373	1583	314	737	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	0.37	0.53	0.34	0.12	1.10	0.17	1.16	1.08	0.00	0.60	0.93	0.01

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: 1.16

Intersection Signal Delay (s/veh): 73.0	Intersection LOS: E
Intersection Capacity Utilization 94.0%	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: 10: U.S. Highway 24 & N Marksheffel Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	2315	278	122	1837	27	245	578	115	21	612	102
Future Volume (vph)	136	2315	278	122	1837	27	245	578	115	21	612	102
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	148	2516	302	133	1997	29	266	628	125	23	665	111
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	15.1	67.1		12.9	64.9		17.0	27.0		13.0	23.0	
Total Split (%)	12.6%	55.9%		10.8%	54.1%		14.2%	22.5%		10.8%	19.2%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	7.6	59.6	120.0	5.4	57.4	120.0	9.0	24.2	120.0	5.0	15.0	120.0
Actuated g/C Ratio	0.06	0.50	1.00	0.05	0.48	1.00	0.08	0.20	1.00	0.04	0.13	1.00
v/c Ratio	0.68	0.99	0.19	0.86	0.82	0.01	1.03	0.88	0.07	0.16	1.50	0.07
Control Delay (s/veh)	71.3	47.4	0.2	100.5	30.4	0.0	120.0	62.9	0.0	58.1	275.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.3	47.4	0.2	100.5	30.4	0.0	120.0	62.9	0.0	58.1	275.1	0.0
LOS	E	D	A	F	C	A	F	E	A	E	F	A
Approach Delay (s/veh)		43.8			34.4			70.1			230.7	
Approach LOS		D			C			E			F	
Queue Length 50th (ft)	58	689	0	53	473	0	~115	~290	0	9	~376	0
Queue Length 95th (ft)	#102	#831	0	#112	541	0	#205	#415	0	23	#496	0
Internal Link Dist (ft)		990			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	217	2525	1583	154	2432	1583	257	713	1583	143	442	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	0.68	1.00	0.19	0.86	0.82	0.02	1.04	0.88	0.08	0.16	1.50	0.07

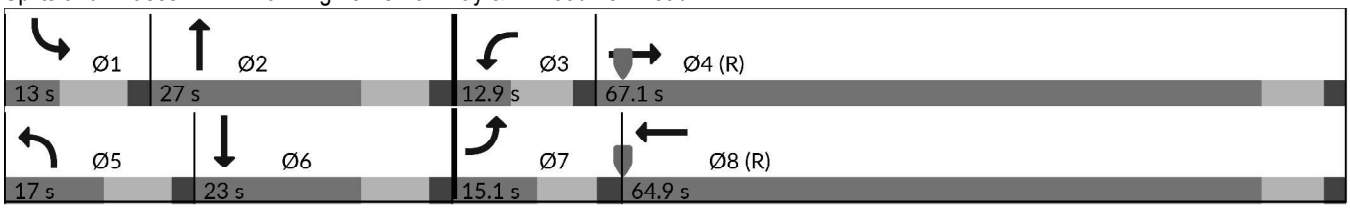
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.50

Intersection Signal Delay (s/veh): 66.2	Intersection LOS: E
Intersection Capacity Utilization 98.6%	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: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	805	304	6	845	517	571	33	0	0	360	101
Future Volume (vph)	87	805	304	6	845	517	571	33	0	0	360	101
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1770	3539	1863	3614	3539	1583
Flt Permitted	0.225			0.225			0.521					
Satd. Flow (perm)	419	3539	1583	813	3539	1583	970	3539	1863	3614	3539	1583
Satd. Flow (RTOR)			330			562						27
Lane Group Flow (vph)	95	875	330	7	918	562	621	36	0	0	391	110
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	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)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	37.5	37.5	37.5	37.5	37.5	37.5
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	17.8	17.8	17.8	17.8	17.8	17.8	33.2	33.2			33.2	33.2
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.30	0.55	0.55			0.55	0.55
v/c Ratio	0.76	0.83	0.47	0.02	0.87	0.64	1.15	0.01			0.19	0.12
Control Delay (s/veh)	62.3	28.5	4.8	15.3	31.5	5.9	109.5	6.2			7.1	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	62.3	28.5	4.8	15.3	31.5	5.9	109.5	6.2			7.1	5.5
LOS	E	C	A	B	C	A	F	A			A	A
Approach Delay (s/veh)		25.0			21.8			103.9			6.8	
Approach LOS		C			C			F			A	
Queue Length 50th (ft)	31	153	0	1	163	0	~276	2			33	13
Queue Length 95th (ft)	#104	#244	49	5	#263	63	#450	7			53	32
Internal Link Dist (ft)		1504			2078			1572			381	
Turn Bay Length (ft)	150		150	150		150	150					150
Base Capacity (vph)	125	1061	705	243	1061	868	536	1958			1958	887
Starvation Cap Reductn	0	0	0	0	0	0	0	0			0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0			0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0			0	0
Reduced v/c Ratio	0.76	0.82	0.47	0.03	0.87	0.65	1.16	0.02			0.20	0.12

Intersection Summary

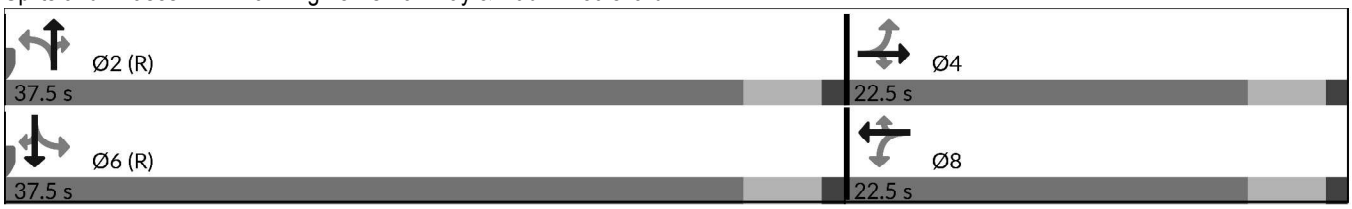
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay (s/veh): 34.6	Intersection LOS: C
Intersection Capacity Utilization 84.8%	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.

Splits and Phases: 1: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	9	1	307	151	0
Future Vol, veh/h	3	9	1	307	151	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	10	1	334	164	0
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	8.2	10	10.6
HCM LOS	A	A	B

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%
Vol Right, %	0%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	9	1	307	151	0
LT Vol	3	0	0	0	151	0
Through Vol	0	9	1	0	0	0
RT Vol	0	0	0	307	0	0
Lane Flow Rate	3	10	1	334	164	0
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.005	0.014	0.002	0.404	0.264	0
Departure Headway (Hd)	5.825	5.321	5.06	4.356	5.798	5.297
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	614	672	709	828	619	0
Service Time	3.56	3.055	2.776	2.072	3.54	3.038
HCM Lane V/C Ratio	0.005	0.015	0.001	0.403	0.265	0
HCM Control Delay, s/veh	8.6	8.1	7.8	10	10.6	8
HCM Lane LOS	A	A	A	A	B	N
HCM 95th-tile Q	0	0	0	2	1.1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	1293	180	199	2046	47	295	10	241	72	18	369
Future Volume (vph)	177	1293	180	199	2046	47	295	10	241	72	18	369
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1863	1583	1770	1596	0
Flt Permitted	0.076			0.082			0.299			0.750		
Satd. Flow (perm)	142	5085	1583	153	5085	1583	557	1863	1583	1397	1596	0
Satd. Flow (RTOR)			196			99			190		185	
Lane Group Flow (vph)	192	1405	196	216	2224	51	321	11	262	78	421	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	18.0	59.0	59.0	24.0	65.0	65.0	55.0	55.0	55.0	55.0	55.0	
Total Split (%)	13.0%	42.8%	42.8%	17.4%	47.1%	47.1%	39.9%	39.9%	39.9%	39.9%	39.9%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	63.4	52.9	52.9	72.6	57.5	57.5	47.0	47.0	47.0	47.0	47.0	
Actuated g/C Ratio	0.46	0.38	0.38	0.53	0.42	0.42	0.34	0.34	0.34	0.34	0.34	
v/c Ratio	1.01	0.72	0.26	0.84	1.05	0.07	1.69	0.01	0.39	0.16	0.63	
Control Delay (s/veh)	106.8	39.1	4.7	58.3	73.3	0.1	366.2	30.4	11.7	33.0	25.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	106.8	39.1	4.7	58.3	73.3	0.1	366.2	30.4	11.7	33.0	25.4	
LOS	F	D	A	E	E	A	F	C	B	C	C	
Approach Delay (s/veh)		42.6			70.6			203.6			26.7	
Approach LOS		D			E			F			C	
Queue Length 50th (ft)	~132	397	0	128	~794	0	~421	7	45	49	179	
Queue Length 95th (ft)	#293	455	51	#251	#885	1	#615	21	118	90	298	
Internal Link Dist (ft)		975			516			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	189	1948	727	275	2118	717	189	634	664	475	665	
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	1.02	0.72	0.27	0.79	1.05	0.07	1.70	0.02	0.39	0.16	0.63	

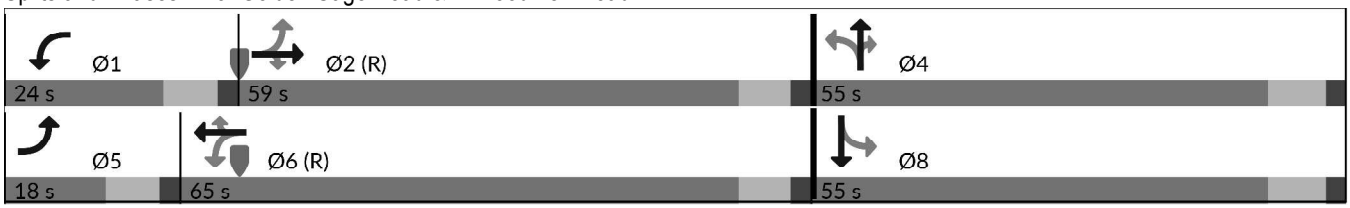
Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.70

Intersection Signal Delay (s/veh): 71.9	Intersection LOS: E
Intersection Capacity Utilization 115.3%	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: 3: Golden Sage Road & E Woodmen Road



Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	125	364	0	76	285
Future Vol, veh/h	0	125	364	0	76	285
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	150	-
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	136	396	0	83	310

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	871	396	0	0	396	0
Stage 1	396	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	322	654	-	-	1163	-
Stage 1	680	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	299	654	-	-	1163	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.95	0	1.75
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	654	1163	-
HCM Lane V/C Ratio	-	-	-	0.208	0.071	-
HCM Control Delay (s/veh)	-	-	0	11.9	8.3	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	0.8	0.2	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	270	232	256	559	562	434
Future Volume (vph)	270	232	256	559	562	434
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.347			
Satd. Flow (perm)	1770	1583	1254	3539	3539	1583
Satd. Flow (RTOR)		252				472
Lane Group Flow (vph)	293	252	278	608	611	472
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	25.0		9.0	35.0	26.0	
Total Split (%)	41.7%		15.0%	58.3%	43.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	15.1	60.0	38.9	36.9	26.8	60.0
Actuated g/C Ratio	0.25	1.00	0.65	0.62	0.45	1.00
v/c Ratio	0.65	0.15	0.25	0.27	0.38	0.29
Control Delay (s/veh)	26.7	0.2	2.0	2.4	13.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.7	0.2	2.0	2.4	13.2	0.4
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	14.5			2.3	7.7	
Approach LOS	B			A	A	
Queue Length 50th (ft)	95	0	2	5	74	0
Queue Length 95th (ft)	144	0	4	9	131	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	649	1583	1070	2175	1579	1583
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	0.16	0.26	0.28	0.39	0.30

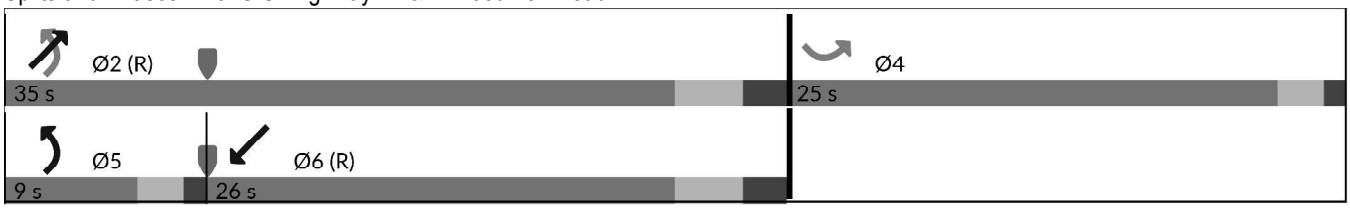
Intersection Summary

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

Maximum v/c Ratio: 0.66

Intersection Signal Delay (s/veh): 7.3	Intersection LOS: A
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	505	913	14	353	46	46	700	14	74	997	8
Future Volume (vph)	13	505	913	14	353	46	46	700	14	74	997	8
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.489			0.315			0.157			0.295		
Satd. Flow (perm)	911	3539	1583	587	3539	1583	292	3539	1583	550	3539	1583
Satd. Flow (RTOR)			530			236			145			145
Lane Group Flow (vph)	14	549	992	15	384	50	50	761	15	80	1084	9
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	17.0		8.0	17.0		8.0	27.0	27.0	8.0	27.0	27.0
Total Split (%)	13.3%	28.3%		13.3%	28.3%		13.3%	45.0%	45.0%	13.3%	45.0%	45.0%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.3	13.3	60.0	16.3	13.3	60.0	35.1	29.6	29.6	35.5	29.8	29.8
Actuated g/C Ratio	0.27	0.22	1.00	0.27	0.22	1.00	0.59	0.49	0.49	0.59	0.50	0.50
v/c Ratio	0.04	0.70	0.62	0.05	0.49	0.03	0.15	0.43	0.01	0.17	0.61	0.01
Control Delay (s/veh)	14.0	27.7	1.8	14.2	22.7	0.0	6.8	12.6	0.0	4.4	15.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	27.7	1.8	14.2	22.7	0.0	6.8	12.6	0.0	4.4	15.1	0.0
LOS	B	C	A	B	C	A	A	B	A	A	B	A
Approach Delay (s/veh)		11.1			19.9			12.0			14.3	
Approach LOS		B			B			B			B	
Queue Length 50th (ft)	4	93	0	4	62	0	6	99	0	4	198	0
Queue Length 95th (ft)	13	#167	0	13	104	0	21	163	0	14	#300	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	318	796	1583	257	796	1583	313	1745	854	447	1756	858
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	0.04	0.69	0.63	0.06	0.48	0.03	0.16	0.44	0.02	0.18	0.62	0.01

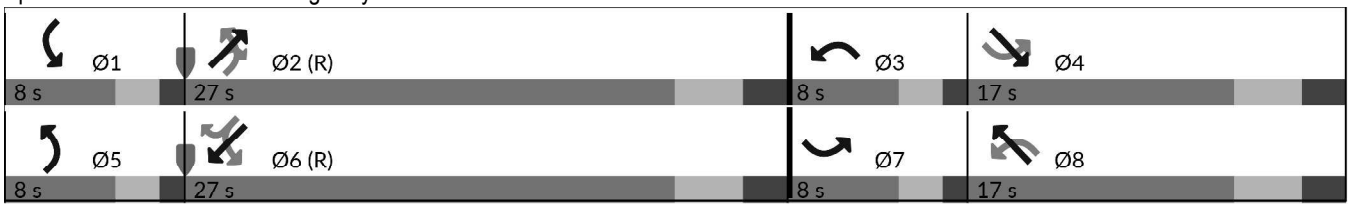
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 13.2	Intersection LOS: B
Intersection Capacity Utilization 57.4%	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: 6: U.S. Highway 24 & Meridian Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	0	14	238	0	3	11	885	48	1	1741	273
Future Volume (vph)	347	0	14	238	0	3	11	885	48	1	1741	273
Satd. Flow (prot)	1770	1583	0	1770	1583	0	1770	3539	1583	1770	3539	1583
Flt Permitted							0.061			0.268		
Satd. Flow (perm)	1863	1583	0	1863	1583	0	114	3539	1583	499	3539	1583
Satd. Flow (RTOR)		103			181				82			126
Lane Group Flow (vph)	377	15	0	259	3	0	12	962	52	1	1892	297
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	26.3		19.2	22.5		9.5	85.0	85.0	9.5	85.0	85.0
Total Split (%)	16.4%	18.8%		13.7%	16.1%		6.8%	60.7%	60.7%	6.8%	60.7%	60.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.6	6.3		18.1	5.5		108.5	107.2	107.2	107.3	105.0	105.0
Actuated g/C Ratio	0.15	0.05		0.13	0.04		0.78	0.77	0.77	0.77	0.75	0.75
v/c Ratio	1.37	0.08		1.13	0.01		0.07	0.35	0.04	0.00	0.71	0.24
Control Delay (s/veh)	233.0	1.0		152.1	0.0		5.2	6.4	0.6	5.0	13.0	4.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	233.0	1.0		152.1	0.0		5.2	6.4	0.6	5.0	13.0	4.3
LOS	F	A		F	A		A	A	A	A	B	A
Approach Delay (s/veh)		224.2			150.4			6.2			11.9	
Approach LOS		F			F			A			B	
Queue Length 50th (ft)	~491	0		~268	0		2	103	0	0	320	29
Queue Length 95th (ft)	#461	0		#354	0		8	242	6	2	734	99
Internal Link Dist (ft)		574			521			928			956	
Turn Bay Length (ft)	150			150			150		420	470		150
Base Capacity (vph)	274	333		229	361		156	2710	1231	432	2655	1219
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	1.38	0.05		1.13	0.01		0.08	0.35	0.04	0.00	0.71	0.24

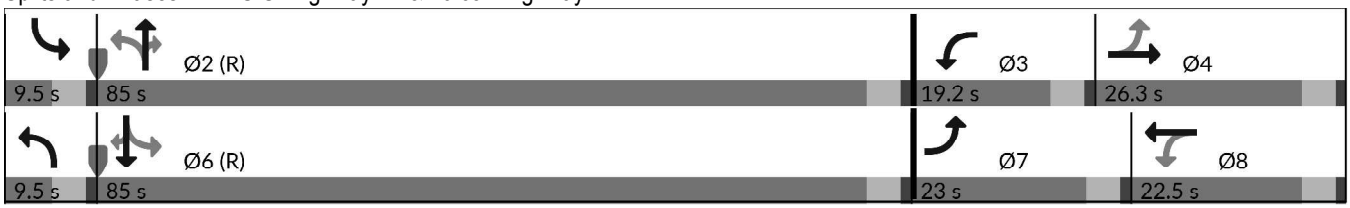
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay (s/veh): 41.2	Intersection LOS: D
Intersection Capacity Utilization 81.5%	ICU Level of Service D
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: 7: U.S. Highway 24 & Falcon Highway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	395	190	0	13	310	799	60	6	1910	0
Future Volume (vph)	0	0	395	190	0	13	310	799	60	6	1910	0
Satd. Flow (prot)	1863	1583	0	0	1763	0	1770	3504	0	1770	3539	1863
Flt Permitted					0.149		0.060			0.306		
Satd. Flow (perm)	1863	1583	0	0	275	0	112	3504	0	570	3539	1863
Satd. Flow (RTOR)		168			127			11				
Lane Group Flow (vph)	0	429	0	0	221	0	337	933	0	7	2076	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0		5.0	4.0		5.0	7.0		4.0	5.0	5.0
Minimum Split (s)	9.5	9.5		9.5	9.5		9.5	14.0		9.5	22.5	22.5
Total Split (s)	9.5	22.0		9.5	22.0		19.0	79.0		9.5	69.5	69.5
Total Split (%)	7.9%	18.3%		7.9%	18.3%		15.8%	65.8%		7.9%	57.9%	57.9%
Yellow Time (s)	3.5	3.5		3.5	3.0		3.5	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	2.0		1.0	2.5		1.0	2.0		2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.5			5.5		4.5	7.0		5.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		26.0			26.0		84.0	79.6		68.0	63.5	
Actuated g/C Ratio		0.22			0.22		0.70	0.66		0.57	0.53	
v/c Ratio		0.90			1.38		1.21	0.40		0.01	1.10	
Control Delay (s/veh)		51.6			226.9		156.2	10.1		6.8	85.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		51.6			226.9		156.2	10.1		6.8	85.7	
LOS		D			F		F	B		A	F	
Approach Delay (s/veh)		51.7			227.0			48.9			85.4	
Approach LOS		D			F			D			F	
Queue Length 50th (ft)		209			~147		~266	148		2	~966	
Queue Length 95th (ft)		#403			#267		#455	238		6	#1104	
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)							150			545		
Base Capacity (vph)		474			159		278	2328		363	1872	
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		0.91			1.39		1.21	0.40		0.02	1.11	

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: 120
Control Type: Actuated-Coordinated

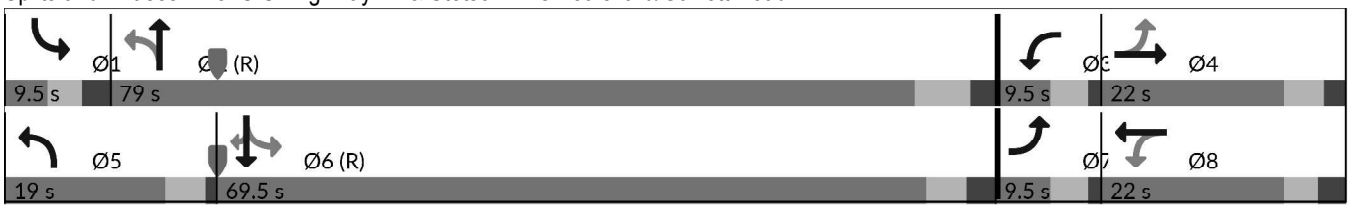
Maximum v/c Ratio: 1.39

Intersection Signal Delay (s/veh): 78.0	Intersection LOS: E
Intersection Capacity Utilization 123.7%	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.

Splits and Phases: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	460	207	65	744	1982	612
Future Volume (vph)	460	207	65	744	1982	612
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.121			
Satd. Flow (perm)	3433	1583	225	3539	3539	1583
Satd. Flow (RTOR)		158				665
Lane Group Flow (vph)	500	225	71	809	2154	665
Turn Type	Prot	Free	pm+pt	NA	NA	Free
Protected Phases	1!		5!	2	6!	
Permitted Phases		Free	2			Free
Detector Phase	1		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	9.5		9.5	22.5	22.5	
Total Split (s)	9.5		9.5	37.5	28.0	
Total Split (%)	20.2%		20.2%	79.8%	59.6%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag	Lead		Lead	Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	5.0	47.0	38.0	33.0	38.6	47.0
Actuated g/C Ratio	0.11	1.00	0.81	0.70	0.82	1.00
v/c Ratio	1.36	0.14	0.20	0.32	0.74	0.42
Control Delay (s/veh)	207.3	0.1	2.1	3.1	6.8	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	207.3	0.1	2.1	3.1	6.8	0.8
LOS	F	A	A	A	A	A
Approach Delay (s/veh)	143.0			3.0	5.4	
Approach LOS	F			A	A	
Queue Length 50th (ft)	~97	0	0	31	161	0
Queue Length 95th (ft)	#171	0	0	46	#285	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	365	1583	346	2484	2906	1583
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	1.37	0.14	0.21	0.33	0.74	0.42

Intersection Summary

Cycle Length: 47
Actuated Cycle Length: 47
Offset: 3.5 (7%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

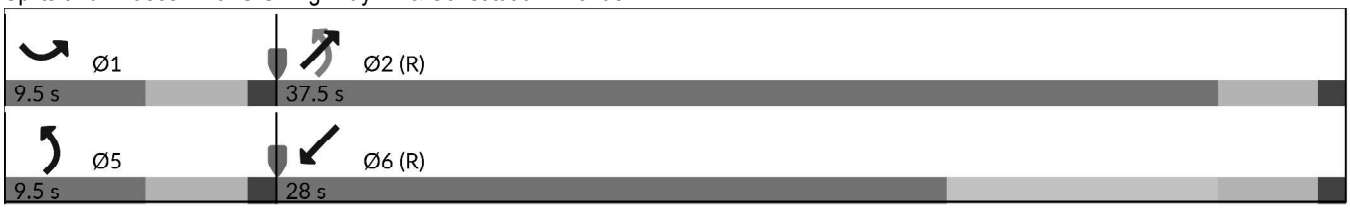
Intersection Signal Delay (s/veh): 27.5	Intersection LOS: C
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

~ 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.

! Phase conflict between lane groups.

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	1300	1043	6	766	99	391	670	4	342	1867	18
Future Volume (vph)	13	1300	1043	6	766	99	391	670	4	342	1867	18
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			552			145			145			145
Lane Group Flow (vph)	14	1413	1134	7	833	108	425	728	4	372	2029	20
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	40.0		8.0	40.0		15.0	50.0		22.0	57.0	
Total Split (%)	6.7%	33.3%		6.7%	33.3%		12.5%	41.7%		18.3%	47.5%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	41.4	120.0	5.0	39.8	120.0	12.0	46.8	120.0	17.2	52.0	120.0
Actuated g/C Ratio	0.04	0.35	1.00	0.04	0.33	1.00	0.10	0.39	1.00	0.14	0.43	1.00
v/c Ratio	0.19	1.15	0.71	0.09	0.70	0.06	1.23	0.52	0.00	0.75	1.32	0.01
Control Delay (s/veh)	61.7	116.7	2.8	58.3	39.8	0.0	174.5	30.1	0.0	59.6	180.7	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)	61.7	116.7	2.8	58.3	39.8	0.0	174.5	30.1	0.0	59.6	180.7	0.0
LOS	E	F	A	E	D	A	F	C	A	E	F	A
Approach Delay (s/veh)		66.0			35.4			83.1			160.6	
Approach LOS		E			D			F			F	
Queue Length 50th (ft)	11	~661	0	5	283	0	~210	228	0	143	~1070	0
Queue Length 95th (ft)	33	#900	0	22	393	0	#314	292	0	194	#1208	0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1221	1583	73	1174	1583	343	1380	1583	543	1533	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	0.19	1.16	0.72	0.10	0.71	0.07	1.24	0.53	0.00	0.69	1.32	0.01

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

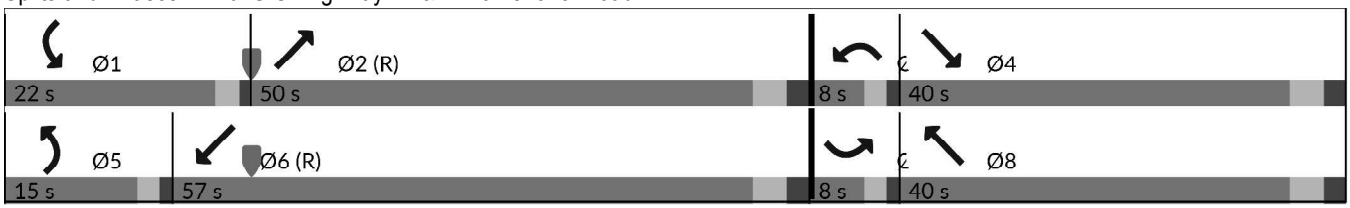
Maximum v/c Ratio: 1.32

Intersection Signal Delay (s/veh): 97.0	Intersection LOS: F
Intersection Capacity Utilization 110.4%	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.

Splits and Phases: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1548	567	76	2621	13	708	415	83	19	383	96
Future Volume (vph)	64	1548	567	76	2621	13	708	415	83	19	383	96
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			262			262			262			262
Lane Group Flow (vph)	70	1683	616	83	2849	14	770	451	90	21	416	104
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	77.0		15.0	79.5		35.0	45.0		13.0	23.0	
Total Split (%)	8.3%	51.3%		10.0%	53.0%		23.3%	30.0%		8.7%	15.3%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	None	
Act Effct Green (s)	5.0	69.7	150.0	7.3	72.0	150.0	27.0	42.2	150.0	5.0	15.0	150.0
Actuated g/C Ratio	0.03	0.46	1.00	0.05	0.48	1.00	0.18	0.28	1.00	0.03	0.10	1.00
v/c Ratio	0.61	0.71	0.38	0.49	1.16	0.00	1.24	0.45	0.05	0.18	1.17	0.06
Control Delay (s/veh)	93.7	34.2	0.7	79.9	116.2	0.0	173.6	47.3	0.0	74.3	161.7	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)	93.7	34.2	0.7	79.9	116.2	0.0	173.6	47.3	0.0	74.3	161.7	0.0
LOS	F	C	A	E	F	A	F	D	A	E	F	A
Approach Delay (s/veh)		27.3			114.7			118.3			127.3	
Approach LOS		C			F			F			F	
Queue Length 50th (ft)	35	477	0	41	~1210	0	~481	202	0	10	~255	0
Queue Length 95th (ft)	#69	534	0	71	#1285	0	#612	260	0	26	#368	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	114	2362	1583	171	2440	1583	617	995	1583	114	353	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	0.61	0.71	0.39	0.49	1.17	0.01	1.25	0.45	0.06	0.18	1.18	0.07

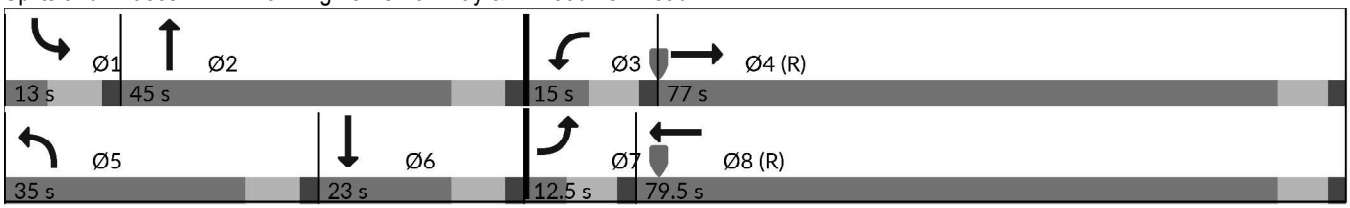
Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay (s/veh): 87.4	Intersection LOS: F
Intersection Capacity Utilization 101.0%	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: 11: Banning Lewis Parkway & E Woodmen Road



Intersection	
Intersection Delay, s/veh	59.4
Intersection LOS	F

Approach	EB	WB	NB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	1218	831	1066
Demand Flow Rate, veh/h	1243	847	1087
Vehicles Circulating, veh/h	214	816	597
Vehicles Exiting, veh/h	1449	868	860
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.6	17.4	149.1
Approach LOS	A	C	F

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	R	LT	TR	LR
RT Channelized					
Lane Util	0.480	0.520	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	597	646	398	449	1087
Cap Entry Lane, veh/h	1109	1184	637	710	855
Entry HV Adj Factor	0.980	0.980	0.981	0.980	0.981
Flow Entry, veh/h	585	633	390	440	1066
Cap Entry, veh/h	1087	1160	625	696	838
V/C Ratio	0.539	0.546	0.625	0.633	1.272
Control Delay, s/veh	9.8	9.5	18.0	16.8	149.1
LOS	A	A	C	C	F
95th %tile Queue, veh	3	3	4	5	39

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	852	486	856	308
Demand Flow Rate, veh/h	869	495	873	314
Vehicles Circulating, veh/h	368	809	438	900
Vehicles Exiting, veh/h	846	502	799	404
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.6	10.3	29.7	12.9
Approach LOS	A	B	D	B

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	R	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.449	0.551	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	390	479	233	262	873	314
Cap Entry Lane, veh/h	962	1039	641	714	979	661
Entry HV Adj Factor	0.980	0.981	0.980	0.983	0.981	0.980
Flow Entry, veh/h	382	470	228	257	856	308
Cap Entry, veh/h	943	1019	628	701	960	648
V/C Ratio	0.405	0.461	0.363	0.367	0.892	0.475
Control Delay, s/veh	8.4	8.8	10.8	9.9	29.7	12.9
LOS	A	A	B	A	D	B
95th %tile Queue, veh	2	2	2	2	13	3

Intersection	
Intersection Delay, s/veh	4.5
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	157	422	266
Demand Flow Rate, veh/h	160	430	271
Vehicles Circulating, veh/h	204	54	268
Vehicles Exiting, veh/h	335	310	216
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.8	4.1	5.5
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	TR	LR
RT Channelized					
Lane Util	0.469	0.531	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	75	85	202	228	271
Cap Entry Lane, veh/h	1119	1194	1284	1356	1131
Entry HV Adj Factor	0.983	0.978	0.981	0.980	0.982
Flow Entry, veh/h	74	83	198	224	266
Cap Entry, veh/h	1100	1168	1260	1330	1110
V/C Ratio	0.067	0.071	0.157	0.168	0.240
Control Delay, s/veh	3.8	3.7	4.2	4.1	5.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	304	337	492
Demand Flow Rate, veh/h	310	344	502
Vehicles Circulating, veh/h	234	106	162
Vehicles Exiting, veh/h	430	438	288
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.5	4.1	7.0
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	R	LR
RT Channelized					
Lane Util	0.471	0.529	0.471	0.529	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	146	164	162	182	502
Cap Entry Lane, veh/h	1088	1164	1224	1298	1237
Entry HV Adj Factor	0.979	0.982	0.980	0.978	0.980
Flow Entry, veh/h	143	161	159	178	492
Cap Entry, veh/h	1065	1143	1200	1269	1213
V/C Ratio	0.134	0.141	0.132	0.140	0.406
Control Delay, s/veh	4.6	4.4	4.1	4.0	7.0
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	859	341	21	573	276	329	50	0	0	340	68
Future Volume (vph)	152	859	341	21	573	276	329	50	0	0	340	68
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1863	1863	3539	1583
Flt Permitted	0.328			0.235			0.532					
Satd. Flow (perm)	611	3539	1583	438	3539	1583	991	3539	1863	1863	3539	1583
Satd. Flow (RTOR)			371			300						57
Lane Group Flow (vph)	165	934	371	23	623	300	358	54	0	0	370	74
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	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)	23.0	23.0	23.0	23.0	23.0	23.0	37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	61.7%	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	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 Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	17.0	17.0	17.0	17.0	17.0	17.0	31.0	31.0			31.0	31.0
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.28	0.52	0.52			0.52	0.52
v/c Ratio	0.95	0.93	0.51	0.18	0.62	0.45	0.69	0.02			0.20	0.08
Control Delay (s/veh)	85.6	39.2	5.2	20.8	21.9	5.0	20.5	7.2			9.1	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	85.6	39.2	5.2	20.8	21.9	5.0	20.5	7.2			9.1	4.1
LOS	F	D	A	C	C	A	C	A			A	A
Approach Delay (s/veh)		35.9			16.5			18.8			8.3	
Approach LOS		D			B			B			A	
Queue Length 50th (ft)	58	172	0	6	102	0	90	4			90	15
Queue Length 95th (ft)	#163	#282	53	24	150	49	#220	11			m93	m22
Internal Link Dist (ft)		1504			2078			1572			381	
Turn Bay Length (ft)	150		150	150		150	150					150
Base Capacity (vph)	173	1002	714	124	1002	663	512	1828			1828	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0			0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0			0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0			0	0
Reduced v/c Ratio	0.95	0.93	0.52	0.19	0.62	0.45	0.70	0.03			0.20	0.09

Intersection Summary

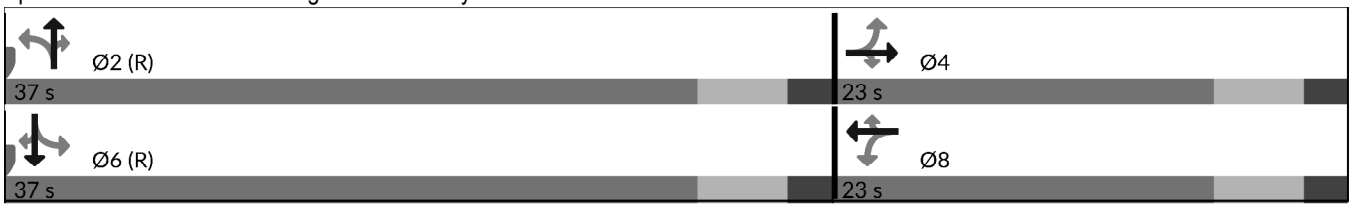
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay (s/veh): 24.4	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: 1: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	131	114	6
Future Vol, veh/h	0	1	1	131	114	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	1	142	124	7
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.7	7.7	9.1
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	100%	0%
Vol Thru, %	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	1	1	131	114	6
LT Vol	0	0	0	0	114	0
Through Vol	0	1	1	0	0	0
RT Vol	0	0	0	131	0	6
Lane Flow Rate	0	1	1	142	124	7
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0	0.002	0.001	0.166	0.182	0.007
Departure Headway (Hd)	5.013	5.013	4.903	4.201	5.284	4.082
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	718	734	859	673	866
Service Time	2.716	2.716	2.603	1.901	3.061	1.859
HCM Lane V/C Ratio	0	0.001	0.001	0.165	0.184	0.008
HCM Control Delay, s/veh	7.7	7.7	7.6	7.7	9.2	6.9
HCM Lane LOS	N	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0.6	0.7	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1922	329	243	1562	87	269	20	166	86	25	294
Future Volume (vph)	366	1922	329	243	1562	87	269	20	166	86	25	294
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1863	1583	1770	1606	0
Flt Permitted	0.077			0.090			0.397			0.743		
Satd. Flow (perm)	143	5085	1583	168	5085	1583	740	1863	1583	1384	1606	0
Satd. Flow (RTOR)			331			158			180		275	
Lane Group Flow (vph)	398	2089	358	264	1698	95	292	22	180	93	347	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	30.0	60.0	60.0	22.0	52.0	52.0	56.0	56.0	56.0	56.0	56.0	
Total Split (%)	21.7%	43.5%	43.5%	15.9%	37.7%	37.7%	40.6%	40.6%	40.6%	40.6%	40.6%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	74.5	52.5	52.5	59.0	44.5	44.5	48.0	48.0	48.0	48.0	48.0	
Actuated g/C Ratio	0.54	0.38	0.38	0.43	0.32	0.32	0.35	0.35	0.35	0.35	0.35	
v/c Ratio	1.16	1.08	0.44	1.10	1.03	0.15	1.13	0.03	0.26	0.19	0.47	
Control Delay (s/veh)	138.9	86.5	5.9	125.6	77.5	0.5	138.9	30.0	5.2	32.8	9.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	138.9	86.5	5.9	125.6	77.5	0.5	138.9	30.0	5.2	32.8	9.9	
LOS	F	F	A	F	E	A	F	C	A	C	A	
Approach Delay (s/veh)		83.8			80.1			85.4			14.8	
Approach LOS		F			F			F			B	
Queue Length 50th (ft)	~372	~764	15	~217	~598	0	~304	13	0	58	44	
Queue Length 95th (ft)	#582	#858	85	#400	#695	1	#490	33	52	103	130	
Internal Link Dist (ft)		975			666			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	342	1934	807	240	1639	617	257	648	668	481	737	
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	1.16	1.08	0.44	1.10	1.04	0.15	1.14	0.03	0.27	0.19	0.47	

Intersection Summary

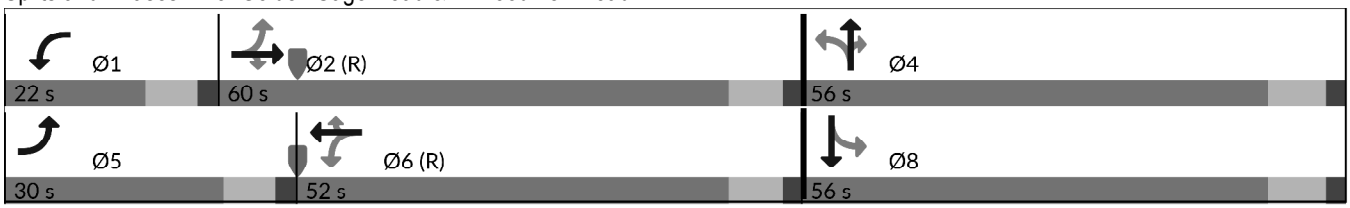
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay (s/veh): 77.4	Intersection LOS: E
Intersection Capacity Utilization 110.8%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	210	249	0	185	315
Future Vol, veh/h	0	210	249	0	185	315
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	150	-
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	228	271	0	201	342

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1015	271	0	0	271	0
Stage 1	271	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	264	768	-	-	1293	-
Stage 1	775	-	-	-	-	-
Stage 2	469	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	223	768	-	-	1293	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	396	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.66	0	3.07
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	768	1293	-
HCM Lane V/C Ratio	-	-	-	0.297	0.156	-
HCM Control Delay (s/veh)	-	-	0	11.7	8.3	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	1.2	0.6	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	660	287	471	763	429	512
Future Volume (vph)	660	287	471	763	429	512
Satd. Flow (prot)	1770	1583	3433	1863	1863	1583
Flt Permitted	0.950		0.196			
Satd. Flow (perm)	1770	1583	708	1863	1863	1583
Satd. Flow (RTOR)		287				557
Lane Group Flow (vph)	717	312	512	829	466	557
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	29.0		8.0	31.0	23.0	
Total Split (%)	48.3%		13.3%	51.7%	38.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	25.6	60.0	28.4	26.4	18.0	60.0
Actuated g/C Ratio	0.43	1.00	0.47	0.44	0.30	1.00
v/c Ratio	0.94	0.19	0.88	1.01	0.83	0.35
Control Delay (s/veh)	41.8	0.2	28.2	50.2	35.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.8	0.2	28.2	50.2	35.6	0.6
LOS	D	A	C	D	D	A
Approach Delay (s/veh)	29.2			41.9	16.6	
Approach LOS	C			D	B	
Queue Length 50th (ft)	234	0	38	~338	156	0
Queue Length 95th (ft)	#443	0	m#73	m#513	#302	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	767	1583	579	819	558	1583
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	0.20	0.88	1.01	0.84	0.35

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay (s/veh): 30.4	Intersection LOS: C
Intersection Capacity Utilization 84.2%	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: 5: U.S. Highway 24 & E Woodmen Road

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	31	282	352	21	444	71	71	664	9	88	745	10
Future Volume (vph)	31	282	352	21	444	71	71	664	9	88	745	10
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.335			0.565			0.158			0.150		
Satd. Flow (perm)	624	3539	1583	1052	3539	1583	294	1863	1583	279	1863	1583
Satd. Flow (RTOR)			383			236			145			145
Lane Group Flow (vph)	34	307	383	23	483	77	77	722	10	96	810	11
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	16.0		8.0	16.0		8.0	28.0	28.0	8.0	28.0	28.0
Total Split (%)	13.3%	26.7%		13.3%	26.7%		13.3%	46.7%	46.7%	13.3%	46.7%	46.7%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.1	13.1	60.0	15.5	11.5	60.0	34.8	28.4	28.4	35.6	30.2	30.2
Actuated g/C Ratio	0.27	0.22	1.00	0.26	0.19	1.00	0.58	0.47	0.47	0.59	0.50	0.50
v/c Ratio	0.12	0.39	0.24	0.06	0.71	0.04	0.25	0.82	0.01	0.31	0.86	0.01
Control Delay (s/veh)	15.1	21.6	0.3	14.2	30.0	0.0	7.8	27.8	0.0	6.7	27.9	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)	15.1	21.6	0.3	14.2	30.0	0.0	7.8	27.8	0.0	6.7	27.9	0.0
LOS	B	C	A	B	C	A	A	C	A	A	C	A
Approach Delay (s/veh)		10.1			25.5			25.6			25.4	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)	9	50	0	6	83	0	9	222	0	5	313	0
Queue Length 95th (ft)	24	86	0	18	#148	0	27	#468	0	m12	m#532	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	262	783	1583	331	688	1583	307	880	824	305	939	869
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	0.13	0.39	0.24	0.07	0.70	0.05	0.25	0.82	0.01	0.31	0.86	0.01

Intersection Summary

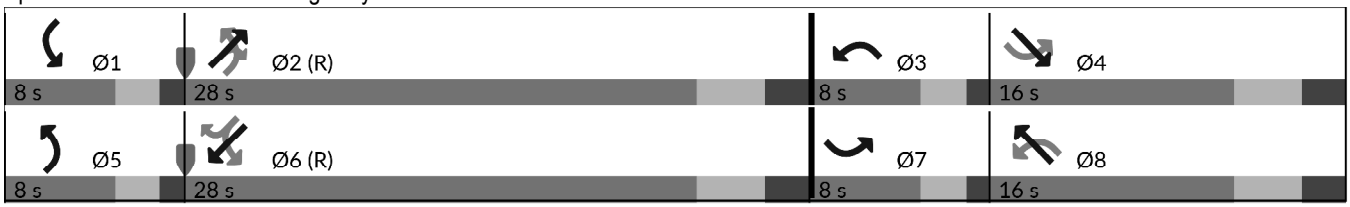
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 21.8	Intersection LOS: C
Intersection Capacity Utilization 74.8%	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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	0	29	75	0	5	32	1620	82	1	880	286
Future Volume (vph)	220	0	29	75	0	5	32	1620	82	1	880	286
Satd. Flow (prot)	1770	1583	0	1770	1583	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.714						0.255			0.092		
Satd. Flow (perm)	1330	1583	0	1863	1583	0	475	3539	1583	171	3539	1583
Satd. Flow (RTOR)		212			117				117			270
Lane Group Flow (vph)	239	32	0	82	5	0	35	1761	89	1	957	311
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	21.0	32.5		11.0	22.5		9.6	87.0	87.0	9.5	86.9	86.9
Total Split (%)	15.0%	23.2%		7.9%	16.1%		6.9%	62.1%	62.1%	6.8%	62.1%	62.1%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	18.5	7.5		11.6	5.5		111.9	110.5	110.5	108.4	104.0	104.0
Actuated g/C Ratio	0.13	0.05		0.08	0.04		0.80	0.79	0.79	0.77	0.74	0.74
v/c Ratio	1.05	0.11		0.55	0.02		0.08	0.63	0.06	0.00	0.36	0.24
Control Delay (s/veh)	131.5	0.7		74.7	0.4		3.6	8.5	0.6	4.0	7.4	1.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	131.5	0.7		74.7	0.4		3.6	8.5	0.6	4.0	7.4	1.7
LOS	F	A		E	A		A	A	A	A	A	A
Approach Delay (s/veh)		116.1			70.4			8.1			6.1	
Approach LOS		F			E			A			A	
Queue Length 50th (ft)	~255	0		76	0		5	250	0	0	144	9
Queue Length 95th (ft)	#339	0		115	0		16	594	10	2	237	44
Internal Link Dist (ft)		3822			521			928			956	
Turn Bay Length (ft)				150			150		420	470		150
Base Capacity (vph)	227	486		147	305		435	2793	1274	195	2627	1245
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.07		0.56	0.02		0.08	0.63	0.07	0.01	0.36	0.25

Intersection Summary

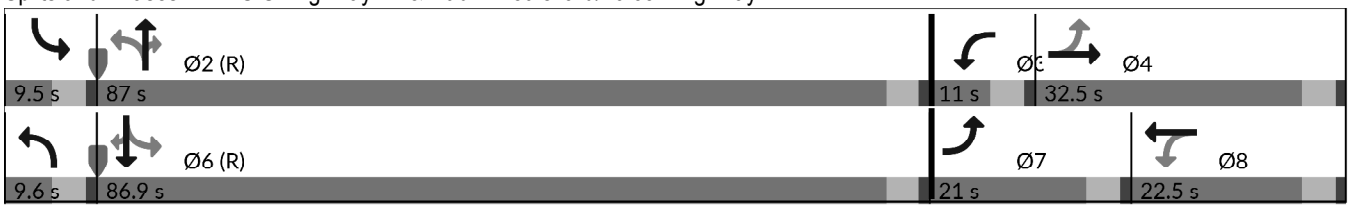
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay (s/veh): 17.3	Intersection LOS: B
Intersection Capacity Utilization 71.1%	ICU Level of Service C
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: 7: U.S. Highway 24 & Dublin Boulevard/Falcon Highway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	220	95	0	1	294	1774	272	14	1005	0
Future Volume (vph)	0	0	220	95	0	1	294	1774	272	14	1005	0
Satd. Flow (prot)	1863	1583	0	0	1773	0	1770	4984	0	1770	3539	1863
Flt Permitted					0.240		0.259			0.055		
Satd. Flow (perm)	1863	1583	0	0	447	0	482	4984	0	102	3539	1863
Satd. Flow (RTOR)		185			74			53				
Lane Group Flow (vph)	0	239	0	0	104	0	320	2224	0	15	1092	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	Perm
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	4.0		7.0	7.0		4.0	5.0	5.0
Minimum Split (s)	22.5	22.5		9.5	9.5		14.0	14.0		9.5	22.5	22.5
Total Split (s)	22.5	22.5		22.5	22.5		108.0	108.0		9.5	117.5	117.5
Total Split (%)	16.1%	16.1%		16.1%	16.1%		77.1%	77.1%		6.8%	83.9%	83.9%
Yellow Time (s)	3.5	3.5		3.0	3.0		5.0	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	1.0		2.5	2.5		2.0	2.0		2.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			5.5		7.0	7.0		5.5	4.5	4.5
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	C-Max
Act Effct Green (s)		17.6			16.6		107.1	107.1		112.4	113.4	
Actuated g/C Ratio		0.13			0.12		0.77	0.77		0.80	0.81	
v/c Ratio		0.66			0.88		0.86	0.58		0.11	0.38	
Control Delay (s/veh)		24.6			77.5		39.4	7.9		4.5	4.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		24.6			77.5		39.4	7.9		4.5	4.1	
LOS		C			E		D	A		A	A	
Approach Delay (s/veh)		24.7			77.5			11.9			4.1	
Approach LOS		C			E			B			A	
Queue Length 50th (ft)		45			28		156	233		2	121	
Queue Length 95th (ft)		139			#147		#469	365		7	145	
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)							150			545		
Base Capacity (vph)		364			119		368	3825		133	2866	
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		0.66			0.87		0.87	0.58		0.11	0.38	

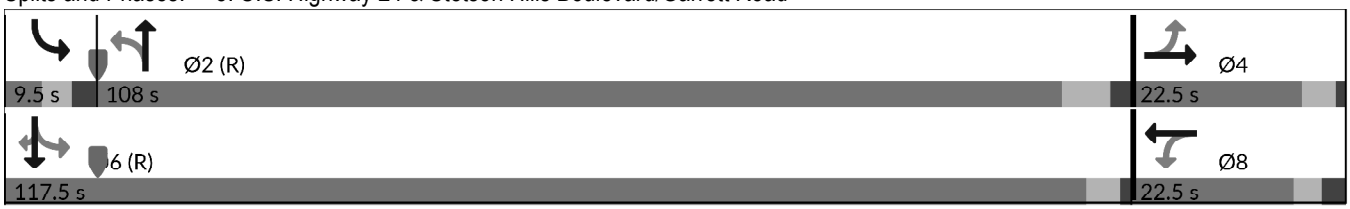
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 81.4%	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: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	511	119	24	1720	863	390
Future Volume (vph)	511	119	24	1720	863	390
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.202			
Satd. Flow (perm)	3433	1583	376	3539	3539	1583
Satd. Flow (RTOR)		129				424
Lane Group Flow (vph)	555	129	26	1870	938	424
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	14.7	60.0	36.3	36.3	32.3	60.0
Actuated g/C Ratio	0.25	1.00	0.61	0.61	0.54	1.00
v/c Ratio	0.66	0.08	0.07	0.87	0.49	0.26
Control Delay (s/veh)	24.2	0.1	7.3	23.4	11.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.2	0.1	7.3	23.4	11.6	0.4
LOS	C	A	A	C	B	A
Approach Delay (s/veh)	19.7			23.2	8.2	
Approach LOS	B			C	A	
Queue Length 50th (ft)	93	0	8	517	83	0
Queue Length 95th (ft)	127	0	m10	m380	201	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	357	2143	1906	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.08	0.07	0.87	0.49	0.27

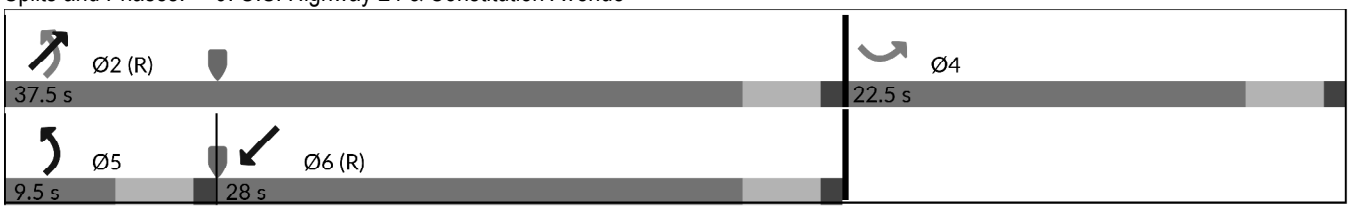
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

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

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	697	493	8	1343	250	975	1586	1	172	796	15
Future Volume (vph)	25	697	493	8	1343	250	975	1586	1	172	796	15
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			536			170			145			145
Lane Group Flow (vph)	27	758	536	9	1460	272	1060	1724	1	187	865	16
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	47.0		8.0	47.0		35.0	51.0		14.0	30.0	
Total Split (%)	6.7%	39.2%		6.7%	39.2%		29.2%	42.5%		11.7%	25.0%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	48.4	120.0	5.0	45.2	120.0	32.0	46.0	120.0	11.0	25.0	120.0
Actuated g/C Ratio	0.04	0.40	1.00	0.04	0.38	1.00	0.27	0.38	1.00	0.09	0.21	1.00
v/c Ratio	0.36	0.53	0.33	0.12	1.09	0.17	1.15	1.27	0.00	1.15	1.17	0.01
Control Delay (s/veh)	70.3	29.3	0.5	59.2	91.2	0.2	123.4	160.9	0.0	160.0	135.6	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)	70.3	29.3	0.5	59.2	91.2	0.2	123.4	160.9	0.0	160.0	135.6	0.0
LOS	E	C	A	E	F	A	F	F	A	F	F	A
Approach Delay (s/veh)		18.5			76.9			146.7			137.9	
Approach LOS		B			E			F			F	
Queue Length 50th (ft)	21	225	0	7	~713	0	~500	~886	0	~172	~423	0
Queue Length 95th (ft)	53	320	0	25	#852	0	#631	#1026	0	#310	#558	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1427	1583	73	1332	1583	915	1356	1583	162	737	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	0.37	0.53	0.34	0.12	1.10	0.17	1.16	1.27	0.00	1.15	1.17	0.01

Intersection Summary

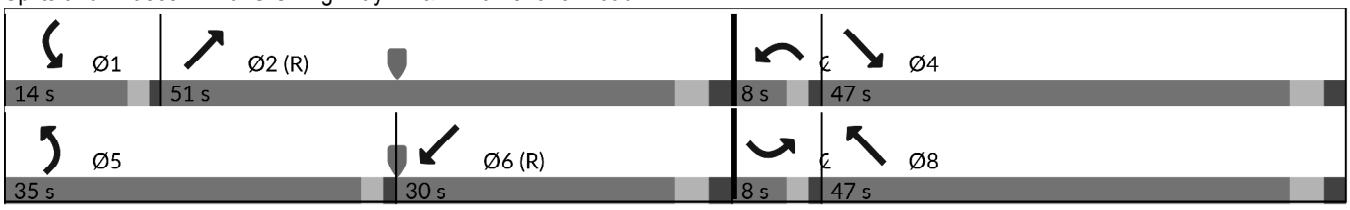
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay (s/veh): 103.2	Intersection LOS: F
Intersection Capacity Utilization 102.2%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	2482	654	122	1975	27	521	578	115	21	612	102
Future Volume (vph)	136	2482	654	122	1975	27	521	578	115	21	612	102
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	148	2698	711	133	2147	29	566	628	125	23	665	111
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	13.0	67.5		12.5	67.0		21.0	27.0		13.0	19.0	
Total Split (%)	10.8%	56.3%		10.4%	55.8%		17.5%	22.5%		10.8%	15.8%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	5.5	60.0	120.0	5.0	59.5	120.0	13.0	24.2	120.0	5.0	11.0	120.0
Actuated g/C Ratio	0.05	0.50	1.00	0.04	0.50	1.00	0.11	0.20	1.00	0.04	0.09	1.00
v/c Ratio	0.94	1.06	0.44	0.93	0.85	0.01	1.52	0.61	0.07	0.16	1.42	0.07
Control Delay (s/veh)	115.3	66.7	0.9	116.0	30.6	0.0	285.3	48.5	0.0	58.1	243.6	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)	115.3	66.7	0.9	116.0	30.6	0.0	285.3	48.5	0.0	58.1	243.6	0.0
LOS	F	E	A	F	C	A	F	D	A	E	F	A
Approach Delay (s/veh)		55.6			35.2			145.6			204.5	
Approach LOS		E			D			F			F	
Queue Length 50th (ft)	60	~842	0	54	515	0	~318	176	0	9	~254	0
Queue Length 95th (ft)	#127	#931	0	#117	585	0	m#422	m217	m0	23	#338	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	157	2542	1583	143	2521	1583	371	1025	1583	143	466	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	0.94	1.06	0.45	0.93	0.85	0.02	1.53	0.61	0.08	0.16	1.43	0.07

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

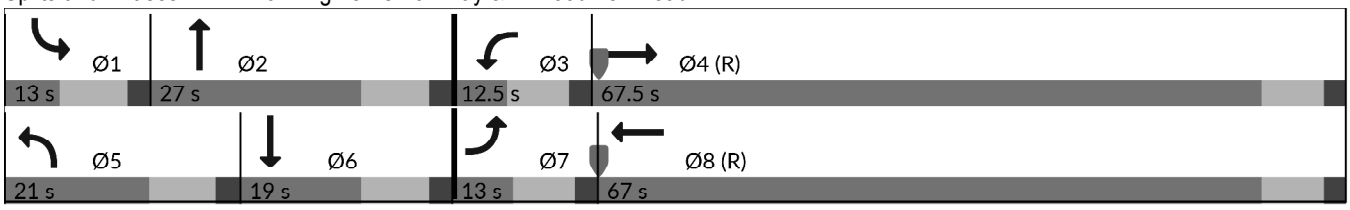
Intersection Signal Delay (s/veh): 79.5	Intersection LOS: E
Intersection Capacity Utilization 104.5%	ICU Level of Service G
Analysis Period (min) 15	

~ 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: 11: Banning Lewis Parkway & E Woodmen Road



Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Approach	EB	WB	NB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	1232	685	497
Demand Flow Rate, veh/h	1257	699	506
Vehicles Circulating, veh/h	181	380	712
Vehicles Exiting, veh/h	898	838	726
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.3	7.5	16.4
Approach LOS	A	A	C

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	TR	LR
RT Channelized					
Lane Util	0.470	0.530	0.471	0.529	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	591	666	329	370	506
Cap Entry Lane, veh/h	1143	1218	952	1028	775
Entry HV Adj Factor	0.980	0.980	0.978	0.981	0.982
Flow Entry, veh/h	579	653	322	363	497
Cap Entry, veh/h	1120	1194	931	1009	761
V/C Ratio	0.517	0.547	0.346	0.360	0.653
Control Delay, s/veh	9.2	9.3	7.6	7.4	16.4
LOS	A	A	A	A	C
95th %tile Queue, veh	3	3	2	2	5

Intersection	
Intersection Delay, s/veh	10.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	822	651	354	434
Demand Flow Rate, veh/h	838	664	362	443
Vehicles Circulating, veh/h	472	341	716	728
Vehicles Exiting, veh/h	699	737	594	277
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.7	6.9	11.2	14.1
Approach LOS	A	A	B	B

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	394	444	312	352	362	443
Cap Entry Lane, veh/h	874	951	986	1063	773	765
Entry HV Adj Factor	0.980	0.981	0.980	0.980	0.979	0.979
Flow Entry, veh/h	386	436	306	345	354	434
Cap Entry, veh/h	857	933	967	1041	756	749
V/C Ratio	0.451	0.467	0.316	0.331	0.469	0.579
Control Delay, s/veh	9.9	9.5	7.0	6.8	11.2	14.1
LOS	A	A	A	A	B	B
95th %tile Queue, veh	2	3	1	1	3	4

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	123	242	123
Demand Flow Rate, veh/h	126	247	126
Vehicles Circulating, veh/h	95	46	110
Vehicles Exiting, veh/h	141	175	183
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.3	3.5	3.6
Approach LOS	A	A	A

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	R	LR
RT Channelized					
Lane Util	0.468	0.532	0.445	0.555	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	59	67	110	137	126
Cap Entry Lane, veh/h	1237	1310	1294	1366	1293
Entry HV Adj Factor	0.983	0.976	0.980	0.978	0.976
Flow Entry, veh/h	58	65	108	134	123
Cap Entry, veh/h	1216	1279	1269	1336	1263
V/C Ratio	0.048	0.051	0.085	0.100	0.097
Control Delay, s/veh	3.3	3.2	3.5	3.5	3.6
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	0

Intersection	
Intersection Delay, s/veh	4.3
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	171	320	254
Demand Flow Rate, veh/h	175	327	259
Vehicles Circulating, veh/h	149	80	137
Vehicles Exiting, veh/h	247	244	270
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.4	3.9	4.7
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	LT	LT	TR	LR
Assumed Moves	LT	LT	R	LR
RT Channelized				
Lane Util	1.000	0.419	0.581	1.000
Follow-Up Headway, s	2.667	2.667	2.535	2.535
Critical Headway, s	4.645	4.645	4.328	4.328
A (Intercept)	1350	1350	1420	1420
B (Slope)	9.199e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	175	137	190	259
Cap Entry Lane, veh/h	1177	1254	1327	1264
Entry HV Adj Factor	0.978	0.980	0.979	0.981
Flow Entry, veh/h	171	134	186	254
Cap Entry, veh/h	1151	1229	1299	1240
V/C Ratio	0.149	0.109	0.143	0.205
Control Delay, s/veh	4.4	3.8	4.0	4.7
LOS	A	A	A	A
95th %tile Queue, veh	1	0	0	1

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	111	45	185	6	55	0	254	29	0	0	50	147
Future Vol, veh/h	111	45	185	6	55	0	254	29	0	0	50	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
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	121	49	201	7	60	0	276	32	0	0	54	160

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	652	638	27	635	798	16	214	0	0	32	0	0
Stage 1	54	54	-	584	584	-	-	-	-	-	-	-
Stage 2	598	584	-	52	214	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	353	393	1042	363	318	1060	1353	-	-	1579	-	-
Stage 1	951	849	-	465	496	-	-	-	-	-	-	-
Stage 2	456	496	-	955	724	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	313	1042	203	253	1060	1353	-	-	1579	-	-
Mov Cap-2 Maneuver	225	313	-	203	253	-	-	-	-	-	-	-
Stage 1	951	849	-	370	395	-	-	-	-	-	-	-
Stage 2	308	395	-	726	724	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.86	23.57	7.49	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1353	-	-	225	313	1042	203	253	-	1579	-	-
HCM Lane V/C Ratio	0.204	-	-	0.535	0.156	0.193	0.032	0.237	-	-	-	-
HCM Control Delay (s/veh)	8.3	-	-	38	18.6	9.3	23.3	23.6	0	0	-	-
HCM Lane LOS	A	-	-	E	C	A	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.8	-	-	2.8	0.5	0.7	0.1	0.9	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	7	1	3	7	0
Future Vol, veh/h	2	7	1	3	7	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	8	1	3	8	0
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.4	6.8	7.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%
Vol Right, %	0%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	7	1	3	7	0
LT Vol	2	0	0	0	7	0
Through Vol	0	7	1	0	0	0
RT Vol	0	0	0	3	0	0
Lane Flow Rate	2	8	1	3	8	0
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.003	0.01	0.001	0.003	0.011	0
Departure Headway (Hd)	5.05	4.55	4.553	3.853	5.059	4.559
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	712	790	789	932	711	0
Service Time	2.758	2.258	2.263	1.563	2.766	2.266
HCM Lane V/C Ratio	0.003	0.01	0.001	0.003	0.011	0
HCM Control Delay, s/veh	7.8	7.3	7.3	6.6	7.8	7.3
HCM Lane LOS	A	A	A	A	A	N
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	1044	40	15	1639	19	98	8	15	12	14	273
Future Volume (vph)	126	1044	40	15	1639	19	98	8	15	12	14	273
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1596	0
Flt Permitted	0.068			0.214			0.273			0.752		
Satd. Flow (perm)	127	3539	1583	399	5085	1583	509	1863	1583	1401	1596	0
Satd. Flow (RTOR)			99			99			95		267	
Lane Group Flow (vph)	137	1135	43	16	1782	21	107	9	16	13	312	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	28.0	72.0	72.0	28.0	72.0	72.0	38.0	38.0	38.0	38.0	38.0	
Total Split (%)	20.3%	52.2%	52.2%	20.3%	52.2%	52.2%	27.5%	27.5%	27.5%	27.5%	27.5%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	93.7	88.3	88.3	81.3	75.3	75.3	28.6	28.6	28.6	28.6	28.6	
Actuated g/C Ratio	0.68	0.64	0.64	0.59	0.55	0.55	0.21	0.21	0.21	0.21	0.21	
v/c Ratio	0.63	0.50	0.04	0.05	0.64	0.02	1.01	0.02	0.03	0.04	0.57	
Control Delay (s/veh)	31.5	15.3	0.0	8.9	24.0	0.0	146.1	42.8	0.2	43.4	13.2	
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)	31.5	15.3	0.0	8.9	24.0	0.0	146.1	42.8	0.2	43.4	13.2	
LOS	C	B	A	A	C	A	F	D	A	D	B	
Approach Delay (s/veh)		16.5			23.7			121.4			14.5	
Approach LOS		B			C			F			B	
Queue Length 50th (ft)	47	241	0	4	401	0	96	6	0	9	33	
Queue Length 95th (ft)	117	391	0	13	501	0	#223	22	0	28	126	
Internal Link Dist (ft)		975			646			496			176	
Turn Bay Length (ft)	300		395	300		385	120		190	115		
Base Capacity (vph)	330	2264	1048	472	2774	908	110	405	418	304	555	
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	0.42	0.50	0.04	0.03	0.64	0.02	0.97	0.02	0.04	0.04	0.56	

Intersection Summary

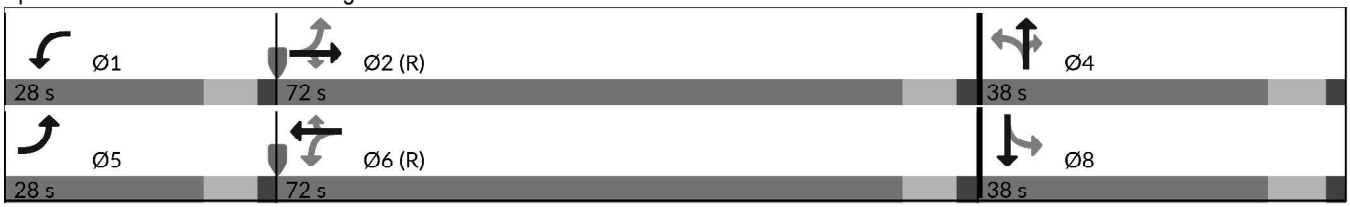
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay (s/veh): 23.8	Intersection LOS: C
Intersection Capacity Utilization 88.8%	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: 3: Golden Sage Road & E Woodmen Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	221	145	147	235	459	354
Future Volume (vph)	221	145	147	235	459	354
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.426			
Satd. Flow (perm)	1770	1583	1539	3539	3539	1583
Satd. Flow (RTOR)		158				385
Lane Group Flow (vph)	240	158	160	255	499	385
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	13.3	60.0	40.7	38.7	30.9	60.0
Actuated g/C Ratio	0.22	1.00	0.68	0.65	0.52	1.00
v/c Ratio	0.61	0.09	0.12	0.11	0.27	0.24
Control Delay (s/veh)	27.2	0.1	1.8	2.2	10.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.2	0.1	1.8	2.2	10.4	0.3
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	16.5			2.1	6.0	
Approach LOS	B			A	A	
Queue Length 50th (ft)	79	0	2	3	52	0
Queue Length 95th (ft)	126	0	4	7	99	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	575	1583	1258	2282	1823	1583
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	0.42	0.10	0.13	0.11	0.27	0.24

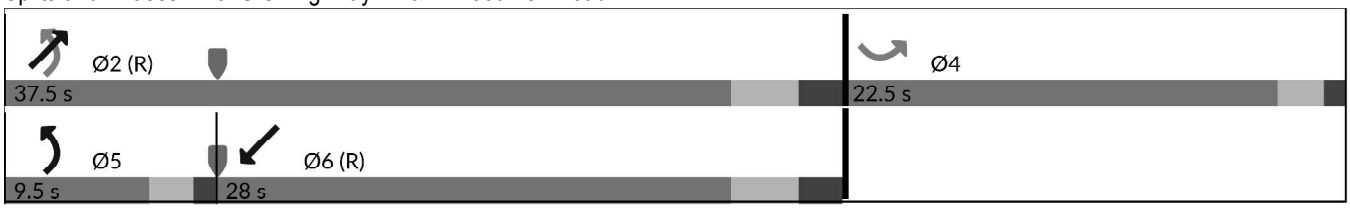
Intersection Summary

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

Maximum v/c Ratio: 0.61

Intersection Signal Delay (s/veh): 7.5	Intersection LOS: A
Intersection Capacity Utilization 40.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	412	746	11	288	38	38	288	11	60	591	6
Future Volume (vph)	10	412	746	11	288	38	38	288	11	60	591	6
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.562			0.397			0.395			0.536		
Satd. Flow (perm)	1047	3539	1583	740	3539	1583	736	3539	1583	998	3539	1583
Satd. Flow (RTOR)			547			236			145			145
Lane Group Flow (vph)	11	448	811	12	313	41	41	313	12	65	642	7
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	15.0		8.0	15.0		8.0	29.0	29.0	8.0	29.0	29.0
Total Split (%)	13.3%	25.0%		13.3%	25.0%		13.3%	48.3%	48.3%	13.3%	48.3%	48.3%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.7	11.7	60.0	14.7	11.7	60.0	36.8	31.3	31.3	37.6	33.3	33.3
Actuated g/C Ratio	0.25	0.20	1.00	0.25	0.20	1.00	0.61	0.52	0.52	0.63	0.56	0.56
v/c Ratio	0.03	0.65	0.51	0.04	0.45	0.02	0.07	0.16	0.01	0.09	0.32	0.00
Control Delay (s/veh)	15.2	28.2	1.1	15.2	23.7	0.0	5.2	9.5	0.0	3.0	9.4	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)	15.2	28.2	1.1	15.2	23.7	0.0	5.2	9.5	0.0	3.0	9.4	0.0
LOS	B	C	A	B	C	A	A	A	A	A	A	A
Approach Delay (s/veh)		10.8			20.8			8.8			8.8	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	3	76	0	3	51	0	4	32	0	2	75	0
Queue Length 95th (ft)	12	#143	0	12	90	0	16	61	0	6	166	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	315	692	1583	266	692	1583	548	1848	896	701	1962	942
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	0.65	0.51	0.05	0.45	0.03	0.07	0.17	0.01	0.09	0.33	0.01

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay (s/veh): 11.4	Intersection LOS: B
Intersection Capacity Utilization 43.6%	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: 6: U.S. Highway 24 & Meridian Road

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	2	560	39	1	1423
Future Volume (vph)	194	2	560	39	1	1423
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.416	
Satd. Flow (perm)	1770	1583	3539	1583	775	3539
Satd. Flow (RTOR)				42		
Lane Group Flow (vph)	211	2	609	42	1	1547
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	22.5		117.5	117.5	117.5	117.5
Total Split (%)	16.1%		83.9%	83.9%	83.9%	83.9%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	18.0	140.0	113.0	113.0	113.0	113.0
Actuated g/C Ratio	0.13	1.00	0.81	0.81	0.81	0.81
v/c Ratio	0.92	0.00	0.21	0.03	0.00	0.54
Control Delay (s/veh)	104.0	0.0	3.3	0.7	3.0	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	104.0	0.0	3.3	0.7	3.0	5.4
LOS	F	A	A	A	A	A
Approach Delay (s/veh)	103.0		3.2			5.4
Approach LOS	F		A			A
Queue Length 50th (ft)	193	0	56	0	0	211
Queue Length 95th (ft)	#350	0	71	7	1	248
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	227	1583	2857	1285	625	2857
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	0.00	0.21	0.03	0.00	0.54

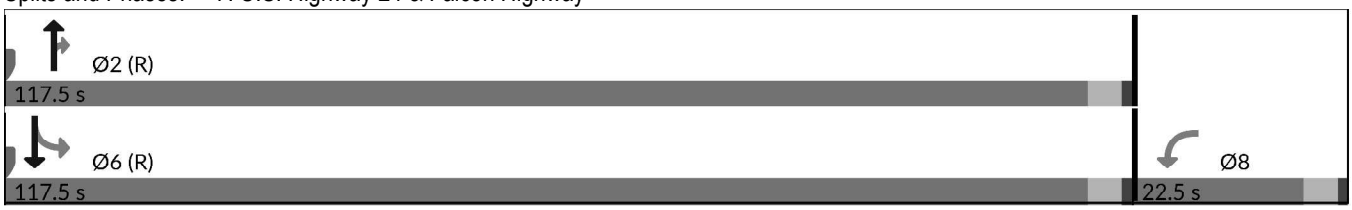
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 13.4	Intersection LOS: B
Intersection Capacity Utilization 57.6%	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.

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	155	10	643	49	5	1548	
Future Volume (vph)	155	10	643	49	5	1548	
Satd. Flow (prot)	1765	0	3500	0	1770	3539	
Flt Permitted	0.955				0.328		
Satd. Flow (perm)	1765	0	3500	0	611	3539	
Satd. Flow (RTOR)	2		10				
Lane Group Flow (vph)	179	0	752	0	5	1683	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	35.0		90.0		15.0		105.0
Total Split (%)	25.0%		64.3%		10.7%		75%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	24.6		100.6		104.4	140.0	
Actuated g/C Ratio	0.18		0.72		0.75	1.00	
v/c Ratio	0.57		0.29		0.00	0.47	
Control Delay (s/veh)	59.0		8.2		5.8	0.4	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	59.0		8.2		5.8	0.4	
LOS	E		A		A	A	
Approach Delay (s/veh)	59.0		8.2			0.5	
Approach LOS	E		A			A	
Queue Length 50th (ft)	148		110		1	0	
Queue Length 95th (ft)	222		202		5	0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	373		2518		534	3536	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.48		0.30		0.01	0.48	

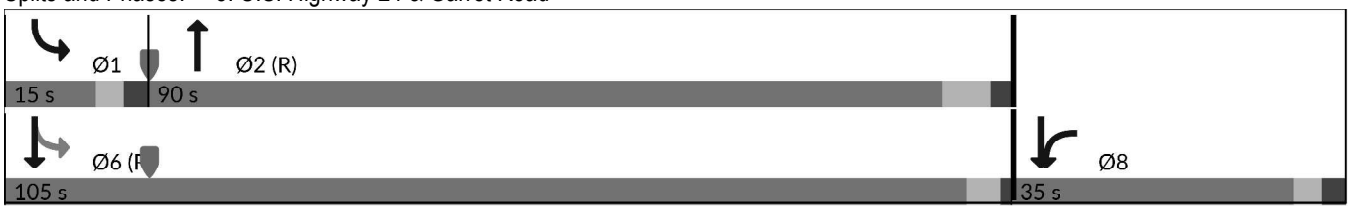
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay (s/veh): 6.7	Intersection LOS: A
Intersection Capacity Utilization 60.3%	ICU Level of Service B
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	206	169	53	409	1396	388
Future Volume (vph)	206	169	53	409	1396	388
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.106			
Satd. Flow (perm)	3433	1583	197	3539	3539	1583
Satd. Flow (RTOR)		184				422
Lane Group Flow (vph)	224	184	58	445	1517	422
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	9.2	60.0	41.8	41.8	35.2	60.0
Actuated g/C Ratio	0.15	1.00	0.70	0.70	0.59	1.00
v/c Ratio	0.42	0.11	0.19	0.18	0.73	0.26
Control Delay (s/veh)	25.1	0.1	12.5	3.1	14.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.1	0.1	12.5	3.1	14.7	0.4
LOS	C	A	B	A	B	A
Approach Delay (s/veh)	13.9			4.2	11.6	
Approach LOS	B			A	B	
Queue Length 50th (ft)	38	0	12	22	221	0
Queue Length 95th (ft)	63	0	60	83	#407	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	299	2465	2073	1583
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	0.22	0.12	0.19	0.18	0.73	0.27

Intersection Summary

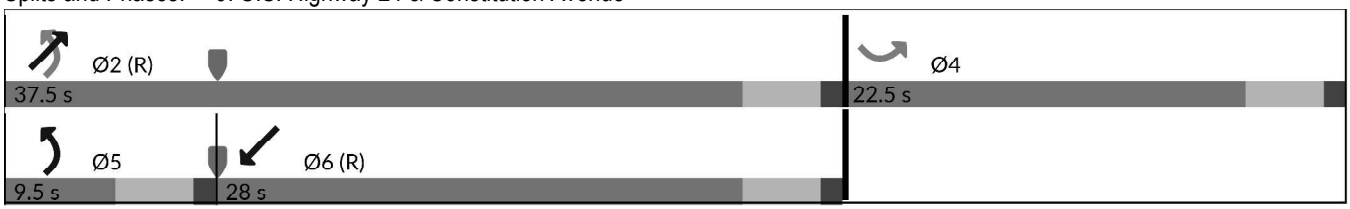
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 10.6	Intersection LOS: B
Intersection Capacity Utilization 57.4%	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.

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	1064	852	5	626	80	319	373	3	279	1261	14
Future Volume (vph)	10	1064	852	5	626	80	319	373	3	279	1261	14
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			602			145			145			145
Lane Group Flow (vph)	11	1157	926	5	680	87	347	405	3	303	1371	15
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	44.0		8.0	44.0		15.0	34.0		34.0	53.0	
Total Split (%)	6.7%	36.7%		6.7%	36.7%		12.5%	28.3%		28.3%	44.2%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	45.2	120.0	5.0	45.2	120.0	12.2	44.2	120.0	15.9	48.0	120.0
Actuated g/C Ratio	0.04	0.38	1.00	0.04	0.38	1.00	0.10	0.37	1.00	0.13	0.40	1.00
v/c Ratio	0.15	0.86	0.58	0.06	0.51	0.05	0.99	0.31	0.00	0.66	0.96	0.00
Control Delay (s/veh)	60.2	43.1	1.5	57.4	30.9	0.0	101.5	28.4	0.0	45.3	50.5	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)	60.2	43.1	1.5	57.4	30.9	0.0	101.5	28.4	0.0	45.3	50.5	0.0
LOS	E	D	A	E	C	A	F	C	A	D	D	A
Approach Delay (s/veh)		24.9			27.6			61.9			49.2	
Approach LOS		C			C			E			D	
Queue Length 50th (ft)	8	421	0	4	206	0	~142	116	0	103	458	0
Queue Length 95th (ft)	29	#629	0	18	294	0	#242	167	0	131	#681	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1333	1583	73	1333	1583	348	1304	1583	886	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	0.15	0.87	0.58	0.07	0.51	0.05	1.00	0.31	0.00	0.34	0.97	0.01

Intersection Summary

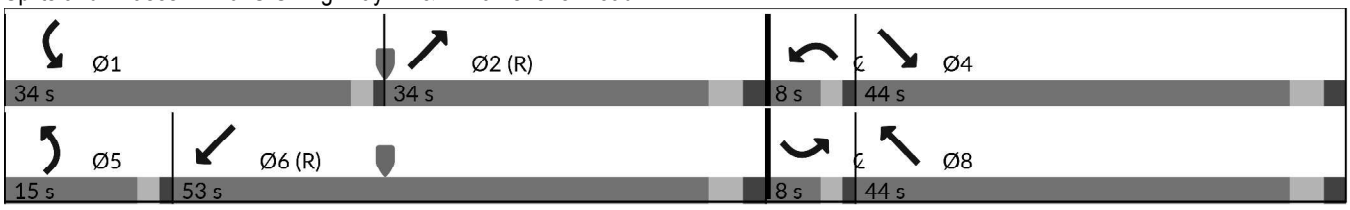
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay (s/veh): 38.3	Intersection LOS: D
Intersection Capacity Utilization 85.0%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1178	50	24	1982	4	60	130	26	6	120	30
Future Volume (vph)	20	1178	50	24	1982	4	60	130	26	6	120	30
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	22	1280	54	26	2154	4	65	141	28	7	130	33
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	13.0	80.0		13.0	80.0		13.0	14.0		13.0	14.0	
Total Split (%)	10.8%	66.7%		10.8%	66.7%		10.8%	11.7%		10.8%	11.7%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	5.5	79.9	120.0	5.5	79.9	120.0	5.0	14.2	120.0	5.0	6.4	120.0
Actuated g/C Ratio	0.05	0.67	1.00	0.05	0.67	1.00	0.04	0.12	1.00	0.04	0.05	1.00
v/c Ratio	0.14	0.37	0.03	0.16	0.63	0.00	0.45	0.33	0.01	0.04	0.69	0.02
Control Delay (s/veh)	57.1	10.4	0.0	57.5	14.1	0.0	66.6	51.4	0.0	56.0	75.6	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)	57.1	10.4	0.0	57.5	14.1	0.0	66.6	51.4	0.0	56.0	75.6	0.0
LOS	E	B	A	E	B	A	E	D	A	E	E	A
Approach Delay (s/veh)		10.8			14.7			49.5			60.1	
Approach LOS		B			B			D			E	
Queue Length 50th (ft)	8	180	0	10	394	0	25	51	0	2	53	0
Queue Length 95th (ft)	22	212	0	25	449	0	50	#114	0	10	#103	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	157	3386	1583	157	3386	1583	143	418	1583	143	187	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	0.14	0.38	0.03	0.17	0.64	0.00	0.45	0.34	0.02	0.05	0.70	0.02

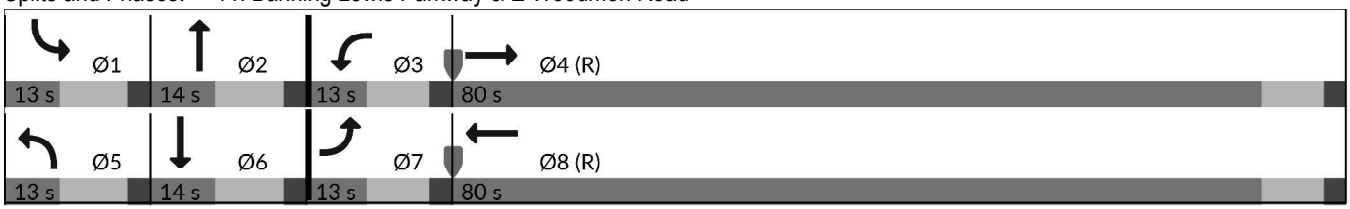
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 59.6%	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.

Splits and Phases: 11: Banning Lewis Parkway & E Woodmen Road



Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	69	248	21	39	0	181	49	0	0	31	67
Future Vol, veh/h	74	69	248	21	39	0	181	49	0	0	31	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
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	80	75	270	23	42	0	197	53	0	0	34	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	475	480	17	501	553	27	107	0	0	53	0	0
Stage 1	34	34	-	447	447	-	-	-	-	-	-	-
Stage 2	441	447	-	54	107	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	473	483	1058	453	439	1043	1482	-	-	1550	-	-
Stage 1	978	866	-	561	572	-	-	-	-	-	-	-
Stage 2	565	572	-	951	806	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	370	419	1058	246	381	1043	1482	-	-	1550	-	-
Mov Cap-2 Maneuver	370	419	-	246	381	-	-	-	-	-	-	-
Stage 1	978	866	-	486	496	-	-	-	-	-	-	-
Stage 2	448	496	-	648	806	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.09	17.55	6.14	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	370	419	1058	246	381	-	1550	-	-
HCM Lane V/C Ratio	0.133	-	-	0.217	0.179	0.255	0.093	0.111	-	-	-	-
HCM Control Delay (s/veh)	7.8	-	-	17.4	15.4	9.6	21.1	15.6	0	0	-	-
HCM Lane LOS	A	-	-	C	C	A	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.8	0.6	1	0.3	0.4	-	0	-	-

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	3	1	5
Future Vol, veh/h	0	1	1	3	1	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	1	3	1	5
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.3	6.8	6.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	100%	0%
Vol Thru, %	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	1	1	3	1	5
LT Vol	0	0	0	0	1	0
Through Vol	0	1	1	0	0	0
RT Vol	0	0	0	3	0	5
Lane Flow Rate	0	1	1	3	1	5
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0	0.001	0.001	0.003	0.002	0.006
Departure Headway (Hd)	4.548	4.548	4.546	3.846	5.044	3.844
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	791	791	935	714	937
Service Time	2.252	2.252	2.25	1.55	2.744	1.544
HCM Lane V/C Ratio	0	0.001	0.001	0.003	0.001	0.005
HCM Control Delay, s/veh	7.3	7.3	7.3	6.6	7.8	6.6
HCM Lane LOS	N	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	1620	135	42	1240	50	103	16	36	20	18	227
Future Volume (vph)	278	1620	135	42	1240	50	103	16	36	20	18	227
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1604	0
Flt Permitted	0.132			0.062			0.321			0.746		
Satd. Flow (perm)	246	3539	1583	115	5085	1583	598	1863	1583	1390	1604	0
Satd. Flow (RTOR)			130			99			95		247	
Lane Group Flow (vph)	302	1761	147	46	1348	54	112	17	39	22	267	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	28.0	72.0	72.0	28.0	72.0	72.0	38.0	38.0	38.0	38.0	38.0	
Total Split (%)	20.3%	52.2%	52.2%	20.3%	52.2%	52.2%	27.5%	27.5%	27.5%	27.5%	27.5%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	97.2	85.6	85.6	79.9	73.2	73.2	25.3	25.3	25.3	25.3	25.3	
Actuated g/C Ratio	0.70	0.62	0.62	0.58	0.53	0.53	0.18	0.18	0.18	0.18	0.18	
v/c Ratio	0.84	0.80	0.14	0.31	0.50	0.06	1.02	0.04	0.10	0.08	0.53	
Control Delay (s/veh)	40.8	25.6	3.3	17.3	22.9	0.3	147.0	43.8	0.5	44.8	11.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	40.8	25.6	3.3	17.3	22.9	0.3	147.0	43.8	0.5	44.8	11.3	
LOS	D	C	A	B	C	A	F	D	A	D	B	
Approach Delay (s/veh)		26.3			21.9			102.6			13.9	
Approach LOS		C			C			F			B	
Queue Length 50th (ft)	131	663	6	12	297	0	99	12	0	16	15	
Queue Length 95th (ft)	#263	829	38	30	362	2	#216	34	0	41	94	
Internal Link Dist (ft)		975			696			496			176	
Turn Bay Length (ft)	300		395	300		385	120		190	115		
Base Capacity (vph)	399	2196	1031	323	2695	885	130	405	418	302	542	
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	0.76	0.80	0.14	0.14	0.50	0.06	0.86	0.04	0.09	0.07	0.49	

Intersection Summary

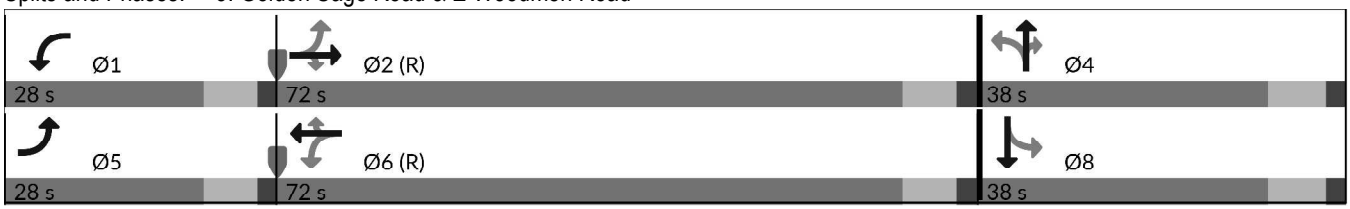
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay (s/veh): 27.0	Intersection LOS: C
Intersection Capacity Utilization 95.6%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	539	179	341	489	351	418
Future Volume (vph)	539	179	341	489	351	418
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.453			
Satd. Flow (perm)	1770	1583	1637	3539	3539	1583
Satd. Flow (RTOR)		195				454
Lane Group Flow (vph)	586	195	371	532	382	454
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	29.0		8.0	31.0	23.0	
Total Split (%)	48.3%		13.3%	51.7%	38.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	23.4	60.0	30.6	28.6	19.4	60.0
Actuated g/C Ratio	0.39	1.00	0.51	0.48	0.32	1.00
v/c Ratio	0.84	0.12	0.36	0.31	0.33	0.28
Control Delay (s/veh)	29.6	0.1	8.2	8.9	16.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.6	0.1	8.2	8.9	16.9	0.4
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	22.3			8.7	8.0	
Approach LOS	C			A	A	
Queue Length 50th (ft)	176	0	42	68	56	0
Queue Length 95th (ft)	#328	0	44	95	88	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	767	1583	1019	1686	1146	1583
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	0.76	0.12	0.36	0.32	0.33	0.29

Intersection Summary

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

Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 12.7	Intersection LOS: B
Intersection Capacity Utilization 60.1%	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.

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	26	230	287	18	363	58	58	363	7	71	375	8
Future Volume (vph)	26	230	287	18	363	58	58	363	7	71	375	8
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.418			0.597			0.512			0.517		
Satd. Flow (perm)	779	3539	1583	1112	3539	1583	954	3539	1583	963	3539	1583
Satd. Flow (RTOR)			312			236			145			145
Lane Group Flow (vph)	28	250	312	20	395	63	63	395	8	77	408	9
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	16.0		8.0	16.0		8.0	28.0	28.0	8.0	28.0	28.0
Total Split (%)	13.3%	26.7%		13.3%	26.7%		13.3%	46.7%	46.7%	13.3%	46.7%	46.7%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	15.2	12.2	60.0	14.6	10.6	60.0	36.4	31.1	31.1	36.4	31.2	31.2
Actuated g/C Ratio	0.25	0.20	1.00	0.24	0.18	1.00	0.61	0.52	0.52	0.61	0.52	0.52
v/c Ratio	0.10	0.34	0.19	0.06	0.63	0.03	0.09	0.21	0.00	0.11	0.22	0.01
Control Delay (s/veh)	14.9	21.5	0.2	14.3	27.8	0.0	5.9	10.2	0.0	3.4	8.7	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)	14.9	21.5	0.2	14.3	27.8	0.0	5.9	10.2	0.0	3.4	8.7	0.2
LOS	B	C	A	B	C	A	A	B	A	A	A	A
Approach Delay (s/veh)		10.0			23.6			9.5			7.7	
Approach LOS		A			C			A			A	
Queue Length 50th (ft)	8	41	0	6	68	0	6	41	0	3	61	0
Queue Length 95th (ft)	21	72	0	16	109	0	24	78	0	9	112	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	279	752	1583	325	658	1583	653	1835	890	659	1837	891
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.33	0.20	0.06	0.60	0.04	0.10	0.22	0.01	0.12	0.22	0.01

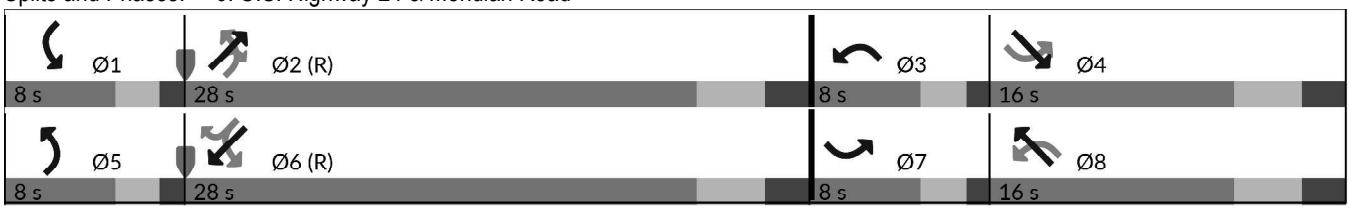
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 12.5	Intersection LOS: B
Intersection Capacity Utilization 43.7%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



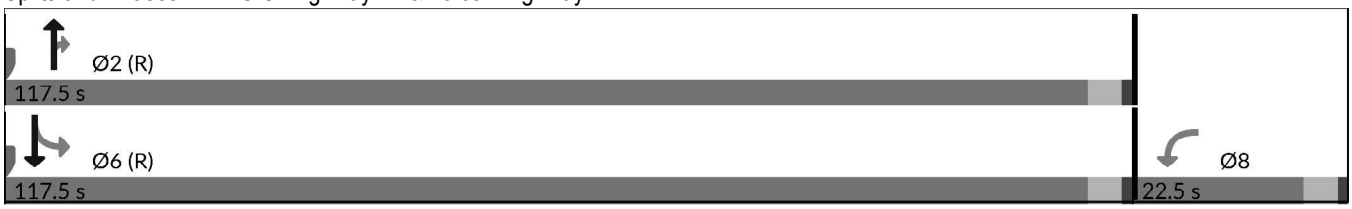
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	61	4	1324	68	1	725
Future Volume (vph)	61	4	1324	68	1	725
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.171	
Satd. Flow (perm)	1770	1583	3539	1583	319	3539
Satd. Flow (RTOR)		3		74		
Lane Group Flow (vph)	66	4	1439	74	1	788
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	22.5		117.5	117.5	117.5	117.5
Total Split (%)	16.1%		83.9%	83.9%	83.9%	83.9%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	10.6	140.0	123.5	123.5	123.5	123.5
Actuated g/C Ratio	0.08	1.00	0.88	0.88	0.88	0.88
v/c Ratio	0.49	0.00	0.46	0.05	0.00	0.25
Control Delay (s/veh)	73.8	0.0	2.8	0.4	2.0	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.8	0.0	2.8	0.4	2.0	1.9
LOS	E	A	A	A	A	A
Approach Delay (s/veh)	69.6		2.7			2.0
Approach LOS	E		A			A
Queue Length 50th (ft)	59	0	120	0	0	50
Queue Length 95th (ft)	108	0	185	7	1	80
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	227	1583	3121	1405	281	3121
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.00	0.46	0.05	0.00	0.25

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
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: 0.49

Intersection Signal Delay (s/veh): 4.4	Intersection LOS: A
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø6
Lane Configurations							
Traffic Volume (vph)	78	1	1423	222	11	800	
Future Volume (vph)	78	1	1423	222	11	800	
Satd. Flow (prot)	1772	0	3468	0	1770	3539	
Flt Permitted	0.953				0.088		
Satd. Flow (perm)	1772	0	3468	0	164	3539	
Satd. Flow (RTOR)			26				
Lane Group Flow (vph)	86	0	1788	0	12	870	
Turn Type	Prot		NA		custom	NA	
Protected Phases	8!		2		1	6 8!	6
Permitted Phases					6		
Detector Phase	8		2		1	6 8	
Switch Phase							
Minimum Initial (s)	4.0		7.0		4.0		5.0
Minimum Split (s)	9.5		14.0		9.5		22.5
Total Split (s)	25.0		100.0		15.0		115.0
Total Split (%)	17.9%		71.4%		10.7%		82%
Yellow Time (s)	3.0		5.0		3.0		3.5
All-Red Time (s)	2.5		2.0		2.5		1.0
Lost Time Adjust (s)	0.0		0.0		0.0		
Total Lost Time (s)	5.5		7.0		5.5		
Lead/Lag			Lag		Lead		
Lead-Lag Optimize?			Yes		Yes		
Recall Mode	None		C-Max		None		C-Max
Act Effct Green (s)	13.8		109.1		115.2	140.0	
Actuated g/C Ratio	0.10		0.78		0.82	1.00	
v/c Ratio	0.49		0.66		0.06	0.24	
Control Delay (s/veh)	68.4		9.8		3.4	0.1	
Queue Delay	0.0		0.0		0.0	0.0	
Total Delay (s/veh)	68.4		9.8		3.4	0.1	
LOS	E		A		A	A	
Approach Delay (s/veh)	68.4		9.8			0.2	
Approach LOS	E		A			A	
Queue Length 50th (ft)	75		271		2	0	
Queue Length 95th (ft)	128		587		6	0	
Internal Link Dist (ft)	349		1813			859	
Turn Bay Length (ft)					545		
Base Capacity (vph)	246		2709		244	3534	
Starvation Cap Reductn	0		0		0	0	
Spillback Cap Reductn	0		0		0	0	
Storage Cap Reductn	0		0		0	0	
Reduced v/c Ratio	0.35		0.66		0.05	0.25	

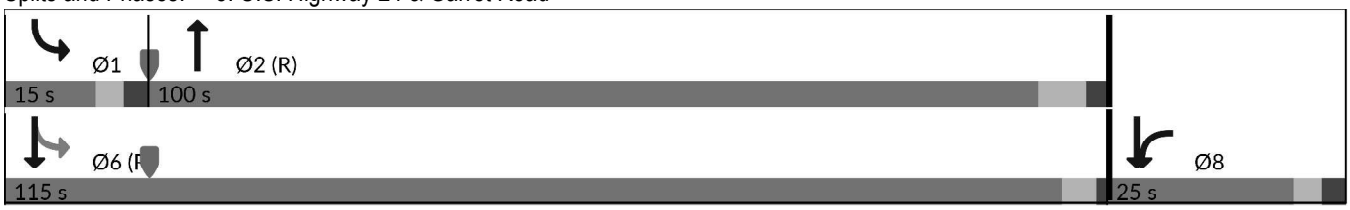
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay (s/veh): 8.6	Intersection LOS: A
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 8: U.S. Highway 24 & Garret Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	329	97	101	1228	570	251
Future Volume (vph)	329	97	101	1228	570	251
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.333			
Satd. Flow (perm)	3433	1583	620	3539	3539	1583
Satd. Flow (RTOR)		105				273
Lane Group Flow (vph)	358	105	110	1335	620	273
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	11.5	60.0	39.5	39.5	30.1	60.0
Actuated g/C Ratio	0.19	1.00	0.66	0.66	0.50	1.00
v/c Ratio	0.54	0.06	0.20	0.57	0.34	0.17
Control Delay (s/veh)	24.7	0.0	6.2	9.6	11.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.7	0.0	6.2	9.6	11.2	0.2
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	19.2			9.4	7.9	
Approach LOS	B			A	A	
Queue Length 50th (ft)	60	0	34	275	71	0
Queue Length 95th (ft)	90	0	m49	351	123	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	540	2330	1777	1583
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	0.35	0.07	0.20	0.57	0.35	0.17

Intersection Summary

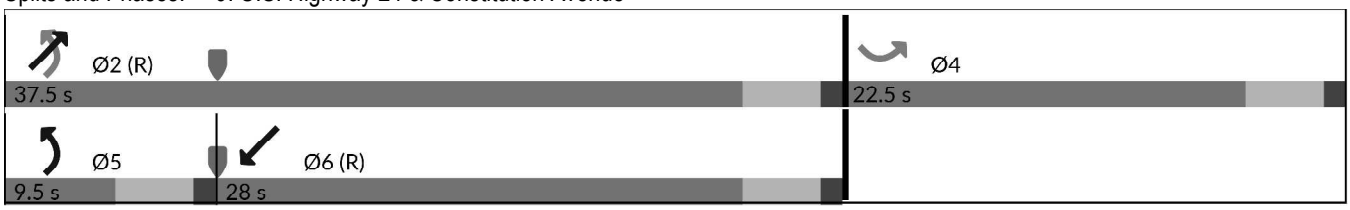
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay (s/veh): 10.5	Intersection LOS: B
Intersection Capacity Utilization 50.8%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	570	403	6	1098	205	795	1118	1	140	515	12
Future Volume (vph)	20	570	403	6	1098	205	795	1118	1	140	515	12
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			438			170			145			145
Lane Group Flow (vph)	22	620	438	7	1193	223	864	1215	1	152	560	13
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	47.0		8.0	47.0		35.0	51.0		14.0	30.0	
Total Split (%)	6.7%	39.2%		6.7%	39.2%		29.2%	42.5%		11.7%	25.0%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	46.3	120.0	5.0	43.1	120.0	32.3	49.2	120.0	9.9	26.8	120.0
Actuated g/C Ratio	0.04	0.39	1.00	0.04	0.36	1.00	0.27	0.41	1.00	0.08	0.22	1.00
v/c Ratio	0.30	0.45	0.27	0.09	0.93	0.14	0.93	0.83	0.00	0.53	0.70	0.00
Control Delay (s/veh)	66.6	28.8	0.4	58.3	52.0	0.1	60.8	38.9	0.0	50.2	52.7	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)	66.6	28.8	0.4	58.3	52.0	0.1	60.8	38.9	0.0	50.2	52.7	0.0
LOS	E	C	A	E	D	A	E	D	A	D	D	A
Approach Delay (s/veh)		18.1			43.9			48.1			51.3	
Approach LOS		B			D			D			D	
Queue Length 50th (ft)	17	175	0	5	473	0	338	457	0	52	183	0
Queue Length 95th (ft)	45	254	0	22	#623	0	#463	#573	0	66	293	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1365	1583	73	1271	1583	932	1449	1583	314	791	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	0.30	0.45	0.28	0.10	0.94	0.14	0.93	0.84	0.00	0.48	0.71	0.01

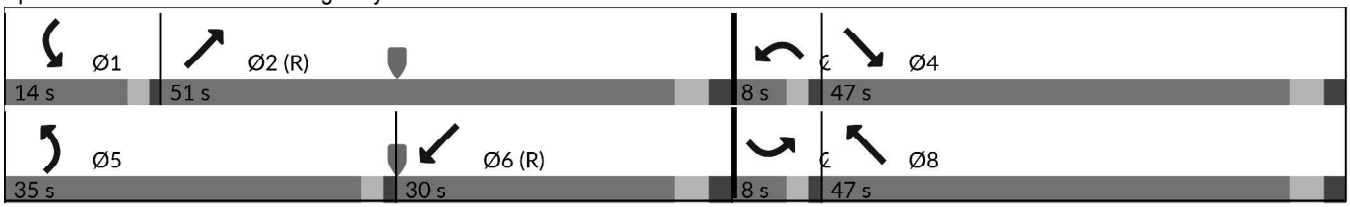
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 41.3	Intersection LOS: D
Intersection Capacity Utilization 78.9%	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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	1915	157	70	1517	15	144	336	67	12	349	62
Future Volume (vph)	75	1915	157	70	1517	15	144	336	67	12	349	62
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	82	2082	171	76	1649	16	157	365	73	13	379	67
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	74.5		12.5	74.5		13.0	20.0		13.0	20.0	
Total Split (%)	10.4%	62.1%		10.4%	62.1%		10.8%	16.7%		10.8%	16.7%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	5.0	69.5	120.0	5.0	69.5	120.0	5.0	19.8	120.0	5.0	12.0	120.0
Actuated g/C Ratio	0.04	0.58	1.00	0.04	0.58	1.00	0.04	0.17	1.00	0.04	0.10	1.00
v/c Ratio	0.57	0.70	0.10	0.53	0.55	0.01	1.09	0.62	0.04	0.09	1.07	0.04
Control Delay (s/veh)	72.4	20.2	0.1	70.1	17.1	0.0	156.5	53.3	0.0	56.7	119.6	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)	72.4	20.2	0.1	70.1	17.1	0.0	156.5	53.3	0.0	56.7	119.6	0.0
LOS	E	C	A	E	B	A	F	D	A	E	F	A
Approach Delay (s/veh)		20.6			19.3			74.1			100.4	
Approach LOS		C			B			E			F	
Queue Length 50th (ft)	32	421	0	30	292	0	~71	132	0	5	~171	0
Queue Length 95th (ft)	#63	480	0	56	336	0	#142	#259	0	15	#273	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	143	2945	1583	143	2945	1583	143	583	1583	143	353	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	0.57	0.71	0.11	0.53	0.56	0.01	1.10	0.63	0.05	0.09	1.07	0.04

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

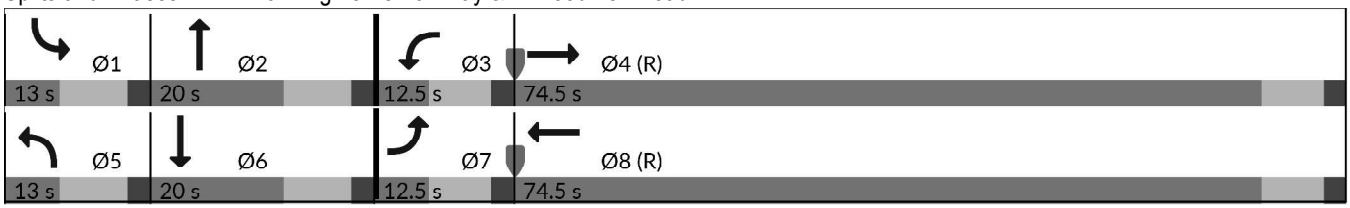
Maximum v/c Ratio: 1.10

Intersection Signal Delay (s/veh): 33.5	Intersection LOS: C
Intersection Capacity Utilization 70.4%	ICU Level of Service C
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: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	805	282	6	845	517	507	29	0	360	98	147
Future Volume (vph)	111	805	282	6	845	517	507	29	0	360	98	147
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1863	1770	3539	1583
Flt Permitted	0.062			0.090			0.601			0.735		
Satd. Flow (perm)	115	1863	1583	168	1863	1583	1120	3539	1863	1369	3539	1583
Satd. Flow (RTOR)			139			243						145
Lane Group Flow (vph)	121	875	307	7	918	562	551	32	0	391	107	160
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	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)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	9.6	61.1	61.1	9.5	61.0	61.0	25.4	26.2	26.2	23.2	24.0	24.0
Total Split (%)	8.0%	50.9%	50.9%	7.9%	50.8%	50.8%	21.2%	21.8%	21.8%	19.3%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	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)	65.2	64.2	64.2	61.5	56.5	56.5	42.6	21.7		38.2	19.5	19.5
Actuated g/C Ratio	0.54	0.54	0.54	0.51	0.47	0.47	0.36	0.18		0.32	0.16	0.16
v/c Ratio	0.91	0.87	0.33	0.04	1.04	0.64	1.08	0.05		0.78	0.18	0.42
Control Delay (s/veh)	81.7	36.7	9.8	12.8	75.2	16.8	97.4	41.0		51.5	52.0	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	81.7	36.7	9.8	12.8	75.2	16.8	97.4	41.0		51.5	52.0	19.9
LOS	F	D	A	B	E	B	F	D		D	D	B
Approach Delay (s/veh)		34.6			52.8			94.4			44.0	
Approach LOS		C			D			F			D	
Queue Length 50th (ft)	46	549	63	2	~773	182	~429	11		266	40	25
Queue Length 95th (ft)	#171	#949	144	10	#1021	307	#526	25		#384	68	83
Internal Link Dist (ft)		1504			2078			1572			381	
Turn Bay Length (ft)	150		150	150		150	150			150		150
Base Capacity (vph)	132	996	911	152	877	873	510	640		498	575	378
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	0.92	0.88	0.34	0.05	1.05	0.64	1.08	0.05		0.79	0.19	0.42

Intersection Summary

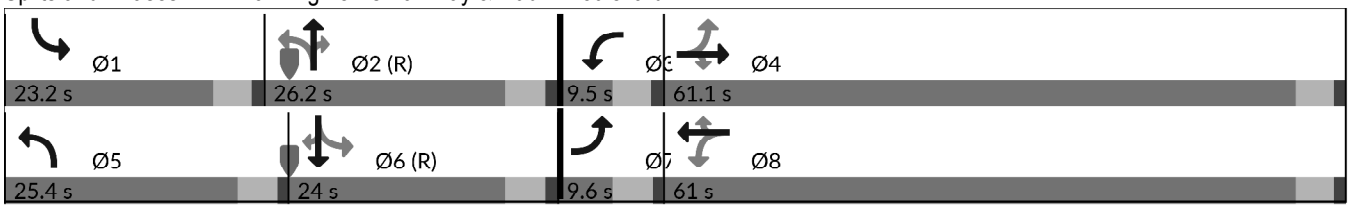
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay (s/veh): 51.5	Intersection LOS: D
Intersection Capacity Utilization 96.6%	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: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	7	1	306	152	0
Future Vol, veh/h	2	7	1	306	152	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	8	1	333	165	0
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	8.2	10	10.6
HCM LOS	A	A	B

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%
Vol Right, %	0%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	7	1	306	152	0
LT Vol	2	0	0	0	152	0
Through Vol	0	7	1	0	0	0
RT Vol	0	0	0	306	0	0
Lane Flow Rate	2	8	1	333	165	0
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.004	0.011	0.002	0.402	0.266	0
Departure Headway (Hd)	5.829	5.325	5.06	4.356	5.788	5.287
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	614	672	709	828	620	0
Service Time	3.563	3.058	2.777	2.073	3.529	3.028
HCM Lane V/C Ratio	0.003	0.012	0.001	0.402	0.266	0
HCM Control Delay, s/veh	8.6	8.1	7.8	10	10.6	8
HCM Lane LOS	A	A	A	A	B	N
HCM 95th-tile Q	0	0	0	2	1.1	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	1044	168	287	1639	19	268	8	359	12	14	273
Future Volume (vph)	126	1044	168	287	1639	19	268	8	359	12	14	273
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1596	0
Flt Permitted	0.078			0.069			0.436			0.752		
Satd. Flow (perm)	145	3539	1583	129	5085	1583	812	1863	1583	1401	1596	0
Satd. Flow (RTOR)			183			99			199		187	
Lane Group Flow (vph)	137	1135	183	312	1782	21	291	9	390	13	312	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	18.0	59.0	59.0	24.0	65.0	65.0	55.0	55.0	55.0	55.0	55.0	
Total Split (%)	13.0%	42.8%	42.8%	17.4%	47.1%	47.1%	39.9%	39.9%	39.9%	39.9%	39.9%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	61.4	51.5	51.5	74.4	58.1	58.1	47.0	47.0	47.0	47.0	47.0	
Actuated g/C Ratio	0.44	0.37	0.37	0.54	0.42	0.42	0.34	0.34	0.34	0.34	0.34	
v/c Ratio	0.75	0.85	0.25	1.17	0.83	0.02	1.05	0.01	0.58	0.02	0.46	
Control Delay (s/veh)	54.9	47.8	4.8	148.1	40.0	0.0	112.9	30.3	21.3	30.6	16.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	54.9	47.8	4.8	148.1	40.0	0.0	112.9	30.3	21.3	30.6	16.1	
LOS	D	D	A	F	D	A	F	C	C	C	B	
Approach Delay (s/veh)		43.1			55.6			60.1			16.7	
Approach LOS		D			E			E			B	
Queue Length 50th (ft)	68	491	0	~284	520	0	~284	5	138	8	82	
Queue Length 95th (ft)	#168	587	50	#476	586	0	#471	19	248	24	170	
Internal Link Dist (ft)		975			516			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	188	1320	705	265	2139	723	276	634	670	477	666	
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	0.73	0.86	0.26	1.18	0.83	0.03	1.05	0.01	0.58	0.03	0.47	

Intersection Summary

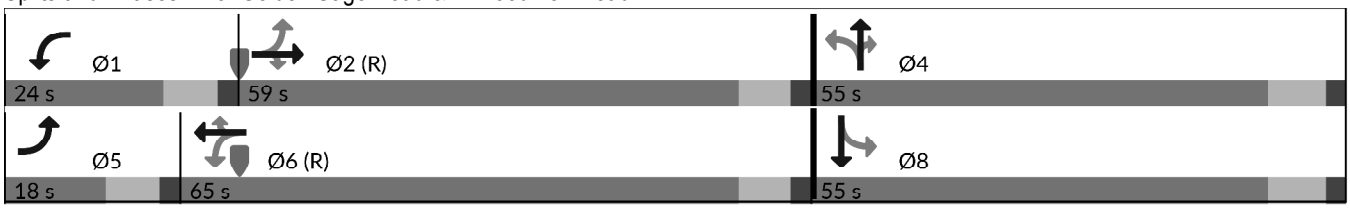
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay (s/veh): 49.6	Intersection LOS: D
Intersection Capacity Utilization 103.1%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	103	514	0	62	400
Future Vol, veh/h	0	103	514	0	62	400
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	150	-
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	112	559	0	67	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1128	559	0	0	559	0
Stage 1	559	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	226	529	-	-	1012	-
Stage 1	573	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	211	529	-	-	1012	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.63	0	1.18
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	529	1012	-
HCM Lane V/C Ratio	-	-	-	0.212	0.067	-
HCM Control Delay (s/veh)	-	-	0	13.6	8.8	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	0.8	0.2	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	282	145	147	432	615	413
Future Volume (vph)	282	145	147	432	615	413
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.327			
Satd. Flow (perm)	1770	1583	1182	3539	3539	1583
Satd. Flow (RTOR)		158				449
Lane Group Flow (vph)	307	158	160	470	668	449
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	24.0		8.0	36.0	28.0	
Total Split (%)	40.0%		13.3%	60.0%	46.7%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	15.5	60.0	38.5	36.5	29.2	60.0
Actuated g/C Ratio	0.26	1.00	0.64	0.61	0.49	1.00
v/c Ratio	0.67	0.09	0.16	0.21	0.38	0.28
Control Delay (s/veh)	26.8	0.1	3.2	4.7	12.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.8	0.1	3.2	4.7	12.2	0.4
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	17.8			4.4	7.5	
Approach LOS	B			A	A	
Queue Length 50th (ft)	99	0	1	4	81	0
Queue Length 95th (ft)	150	0	3	8	136	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	619	1583	984	2151	1719	1583
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	0.50	0.10	0.16	0.22	0.39	0.28

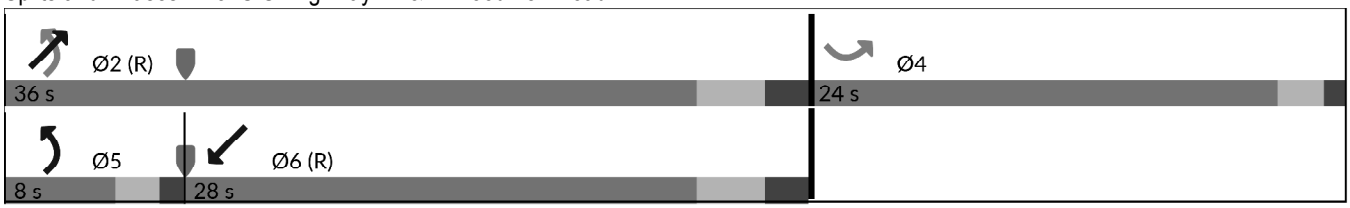
Intersection Summary

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

Maximum v/c Ratio: 0.67

Intersection Signal Delay (s/veh): 8.8	Intersection LOS: A
Intersection Capacity Utilization 47.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	412	746	11	288	38	38	485	11	60	747	6
Future Volume (vph)	10	412	746	11	288	38	38	485	11	60	747	6
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.562			0.400			0.302			0.421		
Satd. Flow (perm)	1047	3539	1583	745	3539	1583	563	3539	1583	784	3539	1583
Satd. Flow (RTOR)			553			236			145			145
Lane Group Flow (vph)	11	448	811	12	313	41	41	527	12	65	812	7
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	17.0		8.0	17.0		8.0	27.0	27.0	8.0	27.0	27.0
Total Split (%)	13.3%	28.3%		13.3%	28.3%		13.3%	45.0%	45.0%	13.3%	45.0%	45.0%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.9	11.9	60.0	14.9	11.9	60.0	36.6	31.2	31.2	37.4	33.1	33.1
Actuated g/C Ratio	0.25	0.20	1.00	0.25	0.20	1.00	0.61	0.52	0.52	0.62	0.55	0.55
v/c Ratio	0.03	0.64	0.51	0.04	0.44	0.02	0.08	0.28	0.01	0.11	0.41	0.00
Control Delay (s/veh)	14.5	26.5	1.1	14.6	23.1	0.0	5.7	10.5	0.0	2.3	8.4	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)	14.5	26.5	1.1	14.6	23.1	0.0	5.7	10.5	0.0	2.3	8.4	0.0
LOS	B	C	A	B	C	A	A	B	A	A	A	A
Approach Delay (s/veh)		10.3			20.3			10.0			7.9	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	3	77	0	3	51	0	4	58	0	2	12	0
Queue Length 95th (ft)	11	121	0	11	86	0	18	108	0	6	222	m0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	319	739	1583	269	739	1583	457	1837	891	585	1951	937
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	0.61	0.51	0.04	0.42	0.03	0.09	0.29	0.01	0.11	0.42	0.01

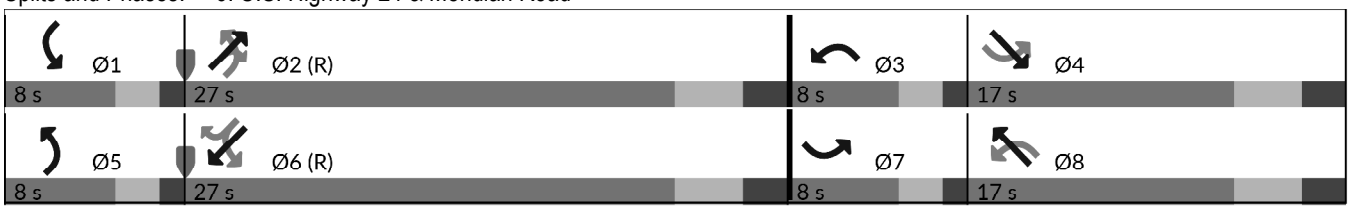
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay (s/veh): 10.7	Intersection LOS: B
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

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

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



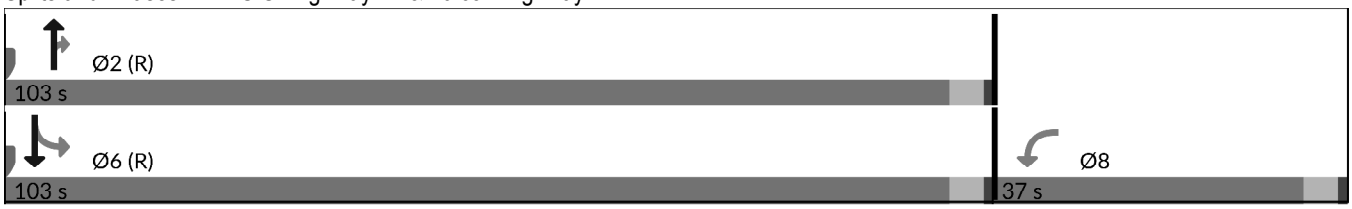
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	2	757	39	1	1579
Future Volume (vph)	194	2	757	39	1	1579
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.325	
Satd. Flow (perm)	1770	1583	3539	1583	605	3539
Satd. Flow (RTOR)				42		
Lane Group Flow (vph)	211	2	823	42	1	1716
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	37.0		103.0	103.0	103.0	103.0
Total Split (%)	26.4%		73.6%	73.6%	73.6%	73.6%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	21.9	140.0	109.1	109.1	109.1	109.1
Actuated g/C Ratio	0.16	1.00	0.78	0.78	0.78	0.78
v/c Ratio	0.76	0.00	0.29	0.03	0.00	0.62
Control Delay (s/veh)	73.5	0.0	5.1	1.4	5.0	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.5	0.0	5.1	1.4	5.0	8.4
LOS	E	A	A	A	A	A
Approach Delay (s/veh)	72.9		5.0			8.5
Approach LOS	E		A			A
Queue Length 50th (ft)	186	0	97	0	0	304
Queue Length 95th (ft)	262	0	154	10	2	459
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	410	1583	2756	1242	471	2756
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	0.51	0.00	0.30	0.03	0.00	0.62

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
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: 0.76

Intersection Signal Delay (s/veh): 12.3	Intersection LOS: B
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	197	0	409	155	0	10	321	643	49	5	1548	156
Future Volume (vph)	197	0	409	155	0	10	321	643	49	5	1548	156
Satd. Flow (prot)	1770	1583	0	0	1765	0	1770	3500	0	1770	3539	1583
Flt Permitted	0.916				0.301		0.062			0.366		
Satd. Flow (perm)	1706	1583	0	0	556	0	115	3500	0	682	3539	1583
Satd. Flow (RTOR)		221			168			12				155
Lane Group Flow (vph)	214	445	0	0	179	0	349	752	0	5	1683	170
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0		4.0	4.0		5.0	7.0		4.0	5.0	5.0
Minimum Split (s)	9.5	9.5		9.5	9.5		9.5	14.0		9.5	22.5	22.5
Total Split (s)	10.2	29.0		18.8	18.8		24.4	81.5		9.5	66.6	66.6
Total Split (%)	8.5%	24.2%		15.7%	15.7%		20.3%	67.9%		7.9%	55.5%	55.5%
Yellow Time (s)	3.5	3.5		3.0	3.0		3.5	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	2.0		2.5	2.5		1.0	2.0		2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.5			5.5		4.5	7.0		5.5	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	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	24.1	23.1			12.9		86.9	82.5		65.5	60.6	60.6
Actuated g/C Ratio	0.20	0.19			0.11		0.72	0.69		0.55	0.51	0.51
v/c Ratio	0.61	0.92			0.85		0.96	0.31		0.01	0.94	0.19
Control Delay (s/veh)	52.3	49.7			43.6		74.8	8.1		6.8	39.9	3.6
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	52.3	49.7			43.6		74.8	8.1		6.8	39.9	3.6
LOS	D	D			D		E	A		A	D	A
Approach Delay (s/veh)		50.6			43.6			29.3			36.5	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)	151	183			8		218	103		1	626	6
Queue Length 95th (ft)	234	#383			#142		#411	172		5	#809	41
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)	150						150			545		150
Base Capacity (vph)	346	487			211		363	2409		412	1787	876
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	0.62	0.91			0.85		0.96	0.31		0.01	0.94	0.19

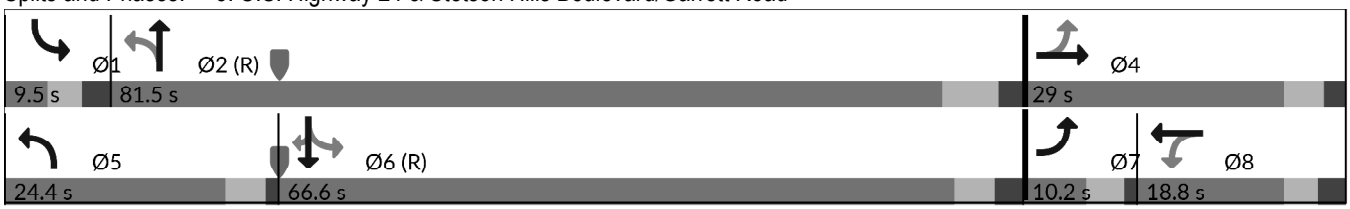
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 37.2	Intersection LOS: D
Intersection Capacity Utilization 113.0%	ICU Level of Service H
Analysis Period (min) 15	

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

Splits and Phases: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	414	169	53	622	1669	525
Future Volume (vph)	414	169	53	622	1669	525
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.117			
Satd. Flow (perm)	3433	1583	218	3539	3539	1583
Satd. Flow (RTOR)		184				571
Lane Group Flow (vph)	450	184	58	676	1814	571
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	13.0	60.0	38.0	38.0	31.4	60.0
Actuated g/C Ratio	0.22	1.00	0.63	0.63	0.52	1.00
v/c Ratio	0.60	0.11	0.19	0.30	0.97	0.36
Control Delay (s/veh)	24.4	0.1	12.6	16.1	37.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	0.1	12.6	16.1	37.3	0.6
LOS	C	A	B	B	D	A
Approach Delay (s/veh)	17.4			15.9	28.5	
Approach LOS	B			B	C	
Queue Length 50th (ft)	75	0	32	231	~413	0
Queue Length 95th (ft)	107	0	70	322	#585	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	296	2239	1852	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.12	0.20	0.30	0.98	0.36

Intersection Summary

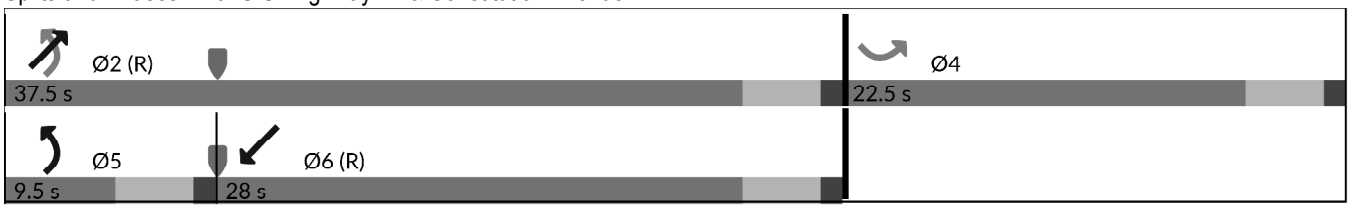
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NETL and 6:SWT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay (s/veh): 24.2	Intersection LOS: C
Intersection Capacity Utilization 65.4%	ICU Level of Service C
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: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	10	1064	852	5	626	80	319	586	3	279	1534	14
Future Volume (vph)	10	1064	852	5	626	80	319	586	3	279	1534	14
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			557			145			145			145
Lane Group Flow (vph)	11	1157	926	5	680	87	347	637	3	303	1667	15
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	41.0		8.0	41.0		14.0	51.0		20.0	57.0	
Total Split (%)	6.7%	34.2%		6.7%	34.2%		11.7%	42.5%		16.7%	47.5%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	42.4	120.0	5.0	42.4	120.0	11.0	47.9	120.0	15.1	52.0	120.0
Actuated g/C Ratio	0.04	0.35	1.00	0.04	0.35	1.00	0.09	0.40	1.00	0.13	0.43	1.00
v/c Ratio	0.15	0.92	0.58	0.06	0.54	0.05	1.10	0.45	0.00	0.70	1.08	0.00
Control Delay (s/veh)	60.2	50.7	1.5	57.4	33.5	0.0	131.8	28.0	0.0	48.7	69.5	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)	60.2	50.7	1.5	57.4	33.5	0.0	131.8	28.0	0.0	48.7	69.5	0.0
LOS	E	D	A	E	C	A	F	C	A	D	E	A
Approach Delay (s/veh)		29.1			29.9			64.5			65.9	
Approach LOS		C			C			E			E	
Queue Length 50th (ft)	8	440	0	4	215	0	~157	189	0	121	~740	0
Queue Length 95th (ft)	29	#666	0	18	306	0	#254	247	0	m127	m#771	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1250	1583	73	1250	1583	314	1412	1583	486	1533	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	0.93	0.58	0.07	0.54	0.05	1.11	0.45	0.00	0.62	1.09	0.01

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: 140
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

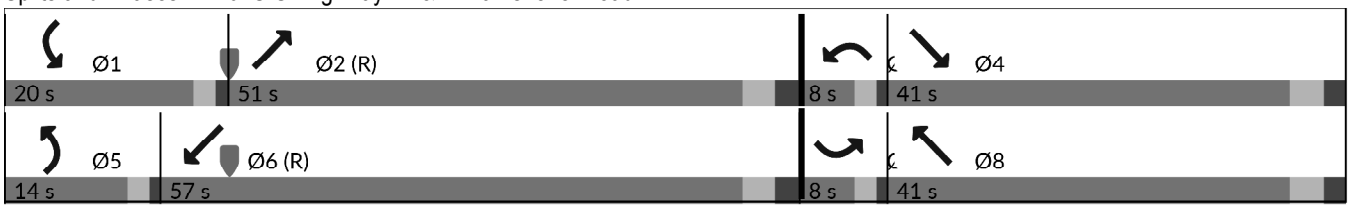
Intersection Signal Delay (s/veh): 47.7	Intersection LOS: D
Intersection Capacity Utilization 92.6%	ICU Level of Service F
Analysis Period (min) 15	

~ 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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1306	458	24	2147	4	60	130	26	6	120	30
Future Volume (vph)	20	1306	458	24	2147	4	60	130	26	6	120	30
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			327			327			327			327
Lane Group Flow (vph)	22	1420	498	26	2334	4	65	141	28	7	130	33
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	67.5		12.5	67.5		27.0	27.0		13.0	13.0	
Total Split (%)	10.4%	56.3%		10.4%	56.3%		22.5%	22.5%		10.8%	10.8%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	6.2	72.6	120.0	6.3	72.6	120.0	7.7	20.8	120.0	5.0	10.5	120.0
Actuated g/C Ratio	0.05	0.61	1.00	0.05	0.61	1.00	0.06	0.17	1.00	0.04	0.09	1.00
v/c Ratio	0.12	0.46	0.31	0.14	0.75	0.00	0.29	0.23	0.01	0.04	0.42	0.02
Control Delay (s/veh)	55.5	15.8	0.5	55.8	22.3	0.0	62.2	56.1	0.0	56.0	55.8	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)	55.5	15.8	0.5	55.8	22.3	0.0	62.2	56.1	0.0	56.0	55.8	0.0
LOS	E	B	A	E	C	A	E	E	A	E	E	A
Approach Delay (s/veh)		12.3			22.6			51.1			45.0	
Approach LOS		B			C			D			D	
Queue Length 50th (ft)	8	248	0	10	543	0	27	54	0	2	51	0
Queue Length 95th (ft)	22	316	0	25	671	0	m40	m87	m0	10	82	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	177	3075	1583	179	3078	1583	543	688	1583	143	308	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	0.12	0.46	0.31	0.15	0.76	0.00	0.12	0.20	0.02	0.05	0.42	0.02

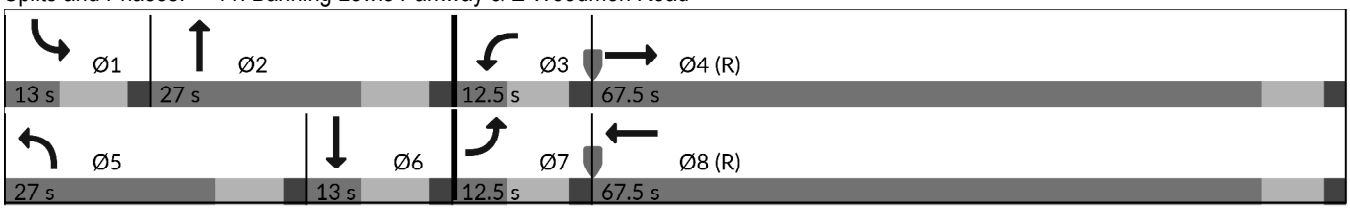
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay (s/veh): 20.6	Intersection LOS: C
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 11: Banning Lewis Parkway & E Woodmen Road



Intersection	
Intersection Delay, s/veh	21.2
Intersection LOS	C

Approach	EB	WB	NB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	1218	725	814
Demand Flow Rate, veh/h	1243	739	830
Vehicles Circulating, veh/h	106	816	597
Vehicles Exiting, veh/h	1449	611	752
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.2	14.6	46.4
Approach LOS	A	B	E

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	R	LT	TR	LR
RT Channelized					
Lane Util	0.480	0.520	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	597	646	347	392	830
Cap Entry Lane, veh/h	1224	1298	637	710	855
Entry HV Adj Factor	0.980	0.980	0.981	0.980	0.981
Flow Entry, veh/h	585	633	341	384	814
Cap Entry, veh/h	1200	1272	625	695	838
V/C Ratio	0.488	0.498	0.545	0.552	0.971
Control Delay, s/veh	8.3	8.1	15.1	14.1	46.4
LOS	A	A	C	B	E
95th %tile Queue, veh	3	3	3	3	16

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	719	256	790	435
Demand Flow Rate, veh/h	733	261	806	443
Vehicles Circulating, veh/h	337	943	325	633
Vehicles Exiting, veh/h	739	188	745	571
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.7	8.9	16.5	12.1
Approach LOS	A	A	C	B

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	R	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.347	0.653	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	254	479	123	138	806	443
Cap Entry Lane, veh/h	990	1066	567	637	1077	829
Entry HV Adj Factor	0.979	0.981	0.977	0.982	0.981	0.981
Flow Entry, veh/h	249	470	120	136	790	435
Cap Entry, veh/h	969	1046	554	626	1056	814
V/C Ratio	0.257	0.449	0.217	0.217	0.748	0.534
Control Delay, s/veh	6.3	8.5	9.4	8.4	16.5	12.1
LOS	A	A	A	A	C	B
95th %tile Queue, veh	1	2	1	1	7	3

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	157	527	399
Demand Flow Rate, veh/h	160	537	407
Vehicles Circulating, veh/h	340	54	268
Vehicles Exiting, veh/h	335	446	323
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.3	6.8	7.6
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	160	537	407
Cap Entry Lane, veh/h	976	1306	1050
Entry HV Adj Factor	0.981	0.981	0.980
Flow Entry, veh/h	157	527	399
Cap Entry, veh/h	957	1281	1029
V/C Ratio	0.164	0.411	0.388
Control Delay, s/veh	5.3	6.8	7.6
LOS	A	A	A
95th %tile Queue, veh	1	2	2

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	437	518	589
Demand Flow Rate, veh/h	446	528	601
Vehicles Circulating, veh/h	333	106	269
Vehicles Exiting, veh/h	537	673	365
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.1	7.3	11.0
Approach LOS	A	A	B

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	446	528	601
Cap Entry Lane, veh/h	983	1238	1049
Entry HV Adj Factor	0.981	0.981	0.980
Flow Entry, veh/h	437	518	589
Cap Entry, veh/h	963	1214	1028
V/C Ratio	0.454	0.426	0.573
Control Delay, s/veh	9.1	7.3	11.0
LOS	A	A	B
95th %tile Queue, veh	2	2	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	862	325	21	573	276	308	49	0	390	67	67
Future Volume (vph)	74	862	325	21	573	276	308	49	0	390	67	67
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1863	1770	3539	1583
Flt Permitted	0.245			0.066			0.707			0.455		
Satd. Flow (perm)	456	1863	1583	123	1863	1583	1317	3539	1863	848	3539	1583
Satd. Flow (RTOR)			167			211						109
Lane Group Flow (vph)	80	937	353	23	623	300	335	53	0	424	73	73
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	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)	9.5	11.0	11.0	9.5	11.0	11.0	9.5	11.0	11.0	9.5	11.0	11.0
Total Split (s)	10.1	69.0	69.0	9.5	68.4	68.4	26.6	12.3	12.3	29.2	14.9	14.9
Total Split (%)	8.4%	57.5%	57.5%	7.9%	57.0%	57.0%	22.2%	10.3%	10.3%	24.3%	12.4%	12.4%
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	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	4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	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)	67.3	62.5	62.5	65.6	60.1	60.1	31.6	9.6		40.2	14.8	14.8
Actuated g/C Ratio	0.56	0.52	0.52	0.55	0.50	0.50	0.26	0.08		0.34	0.12	0.12
v/c Ratio	0.25	0.96	0.39	0.16	0.66	0.33	0.79	0.18		0.88	0.16	0.25
Control Delay (s/veh)	12.0	50.2	9.8	12.1	26.5	6.0	48.8	56.1		61.1	58.7	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	12.0	50.2	9.8	12.1	26.5	6.0	48.8	56.1		61.1	58.7	16.4
LOS	B	D	A	B	C	A	D	E		E	E	B
Approach Delay (s/veh)		37.6			19.7			49.8			55.1	
Approach LOS		D			B			D			E	
Queue Length 50th (ft)	23	668	76	7	336	34	221	21		326	30	9
Queue Length 95th (ft)	44	#972	143	17	463	84	#323	43		m#466	m49	m24
Internal Link Dist (ft)		1504			2078			1572			381	
Turn Bay Length (ft)	150		150	150		150	150			150		150
Base Capacity (vph)	317	980	912	136	968	924	447	282		482	437	291
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	0.25	0.96	0.39	0.17	0.64	0.32	0.75	0.19		0.88	0.17	0.25

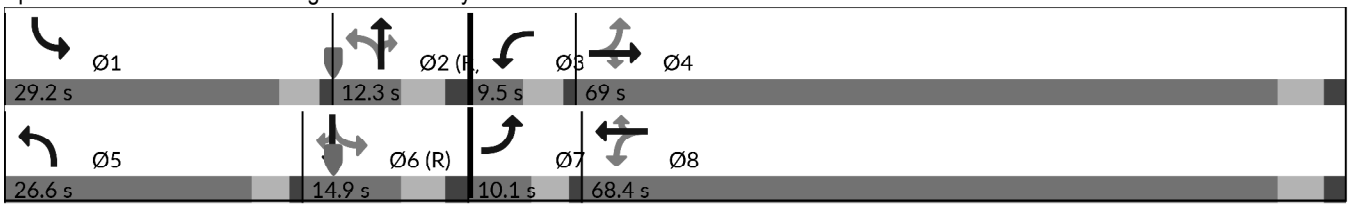
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 36.9	Intersection LOS: D
Intersection Capacity Utilization 91.6%	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: 1: Banning Lewis Parkway & Dublin Boulevard



Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	130	114	5
Future Vol, veh/h	0	1	1	130	114	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	1	141	124	5
Number of Lanes	1	1	1	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay, s/veh	7.7	7.7	9.1
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	100%	0%
Vol Thru, %	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	1	1	130	114	5
LT Vol	0	0	0	0	114	0
Through Vol	0	1	1	0	0	0
RT Vol	0	0	0	130	0	5
Lane Flow Rate	0	1	1	141	124	5
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0	0.002	0.001	0.165	0.182	0.006
Departure Headway (Hd)	5.01	5.01	4.901	4.199	5.282	4.08
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	718	734	859	674	866
Service Time	2.714	2.714	2.602	1.9	3.059	1.857
HCM Lane V/C Ratio	0	0.001	0.001	0.164	0.184	0.006
HCM Control Delay, s/veh	7.7	7.7	7.6	7.7	9.2	6.9
HCM Lane LOS	N	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0.6	0.7	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	1620	302	326	1240	50	241	16	256	20	18	227
Future Volume (vph)	278	1620	302	326	1240	50	241	16	256	20	18	227
Satd. Flow (prot)	1770	3539	1583	1770	5085	1583	1770	1863	1583	1770	1604	0
Flt Permitted	0.107			0.068			0.433			0.746		
Satd. Flow (perm)	199	3539	1583	127	5085	1583	807	1863	1583	1390	1604	0
Satd. Flow (RTOR)			291			158			226		245	
Lane Group Flow (vph)	302	1761	328	354	1348	54	262	17	278	22	267	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	
Total Split (s)	30.5	72.0	72.0	22.0	63.5	63.5	44.0	44.0	44.0	44.0	44.0	
Total Split (%)	22.1%	52.2%	52.2%	15.9%	46.0%	46.0%	31.9%	31.9%	31.9%	31.9%	31.9%	
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	
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	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	
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	
Act Effct Green (s)	84.4	64.5	64.5	73.1	58.6	58.6	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.61	0.47	0.47	0.53	0.42	0.42	0.26	0.26	0.26	0.26	0.26	
v/c Ratio	0.85	1.06	0.36	1.48	0.62	0.07	1.24	0.03	0.47	0.06	0.44	
Control Delay (s/veh)	51.0	77.3	4.8	268.7	33.0	0.1	186.8	38.5	12.2	39.1	9.0	
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)	51.0	77.3	4.8	268.7	33.0	0.1	186.8	38.5	12.2	39.1	9.0	
LOS	D	E	A	F	C	A	F	D	B	D	A	
Approach Delay (s/veh)		64.1			79.6			95.2			11.3	
Approach LOS		E			E			F			B	
Queue Length 50th (ft)	170	~915	18	~391	353	0	~292	11	36	15	15	
Queue Length 95th (ft)	#303	#1054	75	#594	407	0	#471	32	119	38	90	
Internal Link Dist (ft)		975			666			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	386	1654	894	239	2160	763	210	486	580	362	599	
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	0.78	1.06	0.37	1.48	0.62	0.07	1.25	0.03	0.48	0.06	0.45	

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 121 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

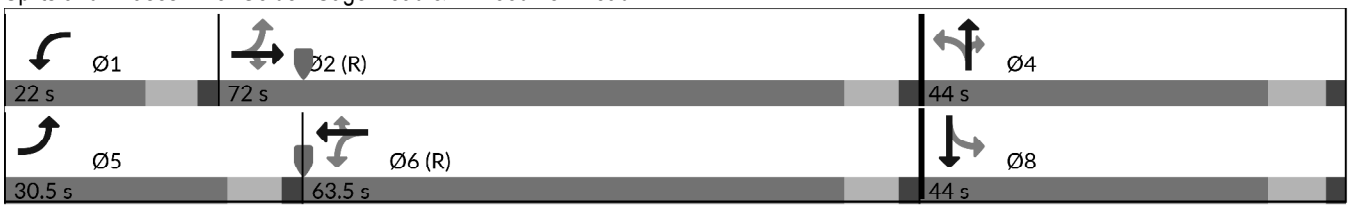
Maximum v/c Ratio: 1.48

Intersection Signal Delay (s/veh): 70.0	Intersection LOS: E
Intersection Capacity Utilization 117.0%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	173	358	0	151	451
Future Vol, veh/h	0	173	358	0	151	451
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	-	150	-
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	188	389	0	164	490

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	389	0	0	389	0
Stage 1	389	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	202	659	-	-	1169	-
Stage 1	685	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	174	659	-	-	1169	-
Mov Cap-2 Maneuver	174	-	-	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.63	0	2.15
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	659	1169	-
HCM Lane V/C Ratio	-	-	-	0.285	0.14	-
HCM Control Delay (s/veh)	-	-	0	12.6	8.6	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	1.2	0.5	-

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	564	179	341	600	40	486
Future Volume (vph)	564	179	341	600	40	486
Satd. Flow (prot)	1770	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.601			
Satd. Flow (perm)	1770	1583	2172	3539	3539	1583
Satd. Flow (RTOR)		195				528
Lane Group Flow (vph)	613	195	371	652	43	528
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	8.0		8.0	10.0	10.0	
Total Split (s)	36.0		10.0	24.0	14.0	
Total Split (%)	60.0%		16.7%	40.0%	23.3%	
Yellow Time (s)	2.0		2.0	3.0	3.0	
All-Red Time (s)	1.0		1.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	3.0		3.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	26.7	60.0	27.3	25.3	14.2	60.0
Actuated g/C Ratio	0.45	1.00	0.46	0.42	0.24	1.00
v/c Ratio	0.77	0.12	0.32	0.43	0.05	0.33
Control Delay (s/veh)	21.0	0.1	8.2	10.3	21.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.0	0.1	8.2	10.3	21.3	0.5
LOS	C	A	A	B	C	A
Approach Delay (s/veh)	16.0			9.6	2.1	
Approach LOS	B			A	A	
Queue Length 50th (ft)	173	0	31	90	6	0
Queue Length 95th (ft)	231	0	37	112	19	0
Internal Link Dist (ft)	307			889	604	
Turn Bay Length (ft)	435		700			330
Base Capacity (vph)	973	1583	1160	1493	837	1583
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	0.12	0.32	0.44	0.05	0.33

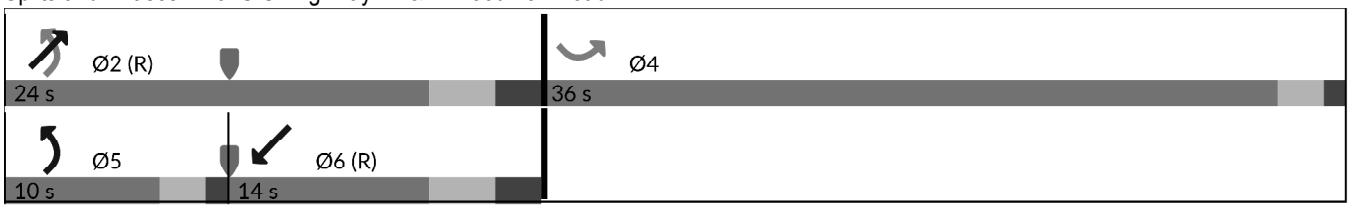
Intersection Summary

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

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 10.0	Intersection LOS: A
Intersection Capacity Utilization 55.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: U.S. Highway 24 & E Woodmen Road



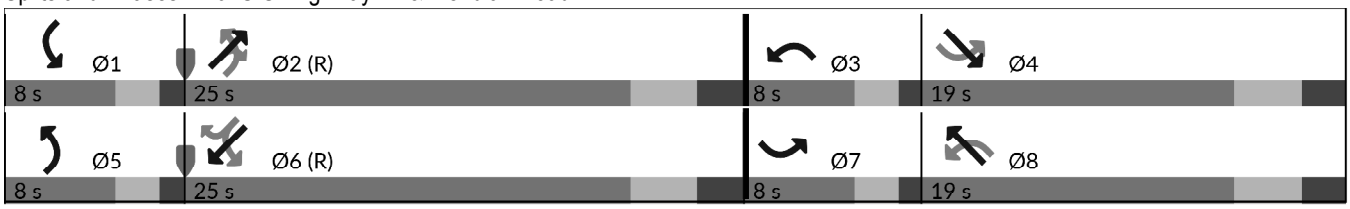
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	26	230	287	18	363	58	58	474	7	71	425	8
Future Volume (vph)	26	230	287	18	363	58	58	474	7	71	425	8
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.431			0.597			0.484			0.443		
Satd. Flow (perm)	803	3539	1583	1112	3539	1583	902	3539	1583	825	3539	1583
Satd. Flow (RTOR)			312			236			145			145
Lane Group Flow (vph)	28	250	312	20	395	63	63	515	8	77	462	9
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		2	6		6
Detector Phase	7	4		3	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
Minimum Split (s)	8.0	10.0		8.0	10.0		8.0	10.0	10.0	8.0	10.0	10.0
Total Split (s)	8.0	19.0		8.0	19.0		8.0	25.0	25.0	8.0	25.0	25.0
Total Split (%)	13.3%	31.7%		13.3%	31.7%		13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	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
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.2	13.2	60.0	15.6	11.6	60.0	35.3	29.9	29.9	35.4	29.9	29.9
Actuated g/C Ratio	0.27	0.22	1.00	0.26	0.19	1.00	0.59	0.50	0.50	0.59	0.50	0.50
v/c Ratio	0.09	0.32	0.19	0.05	0.57	0.03	0.10	0.29	0.00	0.13	0.26	0.01
Control Delay (s/veh)	13.5	20.0	0.2	12.8	25.1	0.0	6.9	11.9	0.0	6.9	11.7	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)	13.5	20.0	0.2	12.8	25.1	0.0	6.9	11.9	0.0	6.9	11.7	0.0
LOS	B	C	A	B	C	A	A	B	A	A	B	A
Approach Delay (s/veh)		9.3			21.3			11.3			10.8	
Approach LOS		A			C			B			B	
Queue Length 50th (ft)	8	41	0	6	68	0	6	55	0	7	52	0
Queue Length 95th (ft)	19	66	0	15	102	0	27	113	0	33	105	0
Internal Link Dist (ft)		507			781			892			765	
Turn Bay Length (ft)	275		180	365		360	830		715	610		210
Base Capacity (vph)	297	909	1583	344	825	1583	613	1763	861	577	1765	862
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	0.09	0.28	0.20	0.06	0.48	0.04	0.10	0.29	0.01	0.13	0.26	0.01

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

Maximum v/c Ratio: 0.58

Intersection Signal Delay (s/veh): 12.8	Intersection LOS: B
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: U.S. Highway 24 & Meridian Road



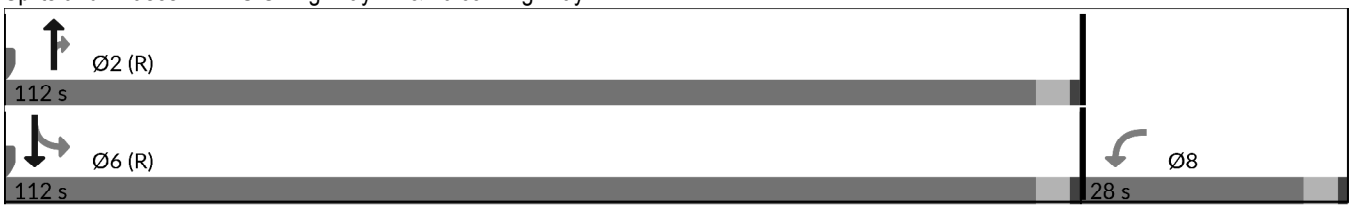
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	61	4	1435	68	1	775
Future Volume (vph)	61	4	1435	68	1	775
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.149	
Satd. Flow (perm)	1770	1583	3539	1583	278	3539
Satd. Flow (RTOR)		3		74		
Lane Group Flow (vph)	66	4	1560	74	1	842
Turn Type	Perm	Free	NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8	Free		2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	22.5	22.5
Total Split (s)	28.0		112.0	112.0	112.0	112.0
Total Split (%)	20.0%		80.0%	80.0%	80.0%	80.0%
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	10.6	140.0	123.5	123.5	123.5	123.5
Actuated g/C Ratio	0.08	1.00	0.88	0.88	0.88	0.88
v/c Ratio	0.49	0.00	0.49	0.05	0.00	0.26
Control Delay (s/veh)	73.8	0.0	3.0	0.4	2.0	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.8	0.0	3.0	0.4	2.0	2.0
LOS	E	A	A	A	A	A
Approach Delay (s/veh)	69.6		2.9			2.0
Approach LOS	E		A			A
Queue Length 50th (ft)	59	0	138	0	0	54
Queue Length 95th (ft)	108	0	212	7	1	87
Internal Link Dist (ft)	521		928			956
Turn Bay Length (ft)		20		420	470	
Base Capacity (vph)	297	1583	3121	1405	245	3121
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	0.22	0.00	0.50	0.05	0.00	0.27

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
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: 0.50

Intersection Signal Delay (s/veh): 4.5	Intersection LOS: A
Intersection Capacity Utilization 51.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: U.S. Highway 24 & Falcon Highway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	0	249	78	0	1	326	1423	222	11	800	150
Future Volume (vph)	111	0	249	78	0	1	326	1423	222	11	800	150
Satd. Flow (prot)	1770	1583	0	0	1772	0	1770	3468	0	1770	3539	1583
Flt Permitted	0.804				0.274		0.326			0.089		
Satd. Flow (perm)	1498	1583	0	0	509	0	607	3468	0	166	3539	1583
Satd. Flow (RTOR)		268			74			32				163
Lane Group Flow (vph)	121	271	0	0	86	0	354	1788	0	12	870	163
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	Perm
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	4.0		7.0	7.0		4.0	5.0	5.0
Minimum Split (s)	22.5	22.5		9.5	9.5		14.0	14.0		9.5	22.5	22.5
Total Split (s)	22.5	22.5		22.5	22.5		108.0	108.0		9.5	117.5	117.5
Total Split (%)	16.1%	16.1%		16.1%	16.1%		77.1%	77.1%		6.8%	83.9%	83.9%
Yellow Time (s)	3.5	3.5		3.0	3.0		5.0	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	1.0		2.5	2.5		2.0	2.0		2.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			5.5		7.0	7.0		5.5	4.5	4.5
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	C-Max
Act Effct Green (s)	15.5	15.5			14.5		109.2	109.2		114.5	115.5	115.5
Actuated g/C Ratio	0.11	0.11			0.10		0.78	0.78		0.82	0.83	0.83
v/c Ratio	0.73	0.65			0.72		0.74	0.65		0.06	0.29	0.12
Control Delay (s/veh)	85.0	14.6			48.8		22.7	9.2		3.3	3.2	0.5
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	85.0	14.6			48.8		22.7	9.2		3.3	3.2	0.5
LOS	F	B			D		C	A		A	A	A
Approach Delay (s/veh)		36.4			48.9			11.5			2.9	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	107	2			10		132	295		2	84	0
Queue Length 95th (ft)	177	89			#95		#456	513		6	107	12
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)	150						150			545		150
Base Capacity (vph)	192	437			126		473	2712		191	2920	1335
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	0.63	0.62			0.68		0.75	0.66		0.06	0.30	0.12

Intersection Summary

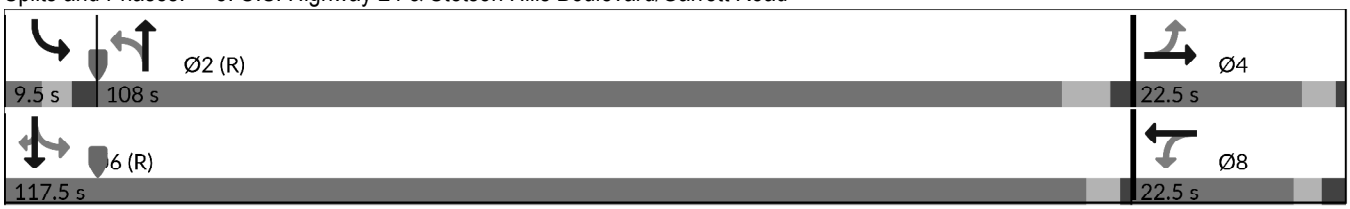
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay (s/veh): 12.6	Intersection LOS: B
Intersection Capacity Utilization 88.3%	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.

Splits and Phases: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



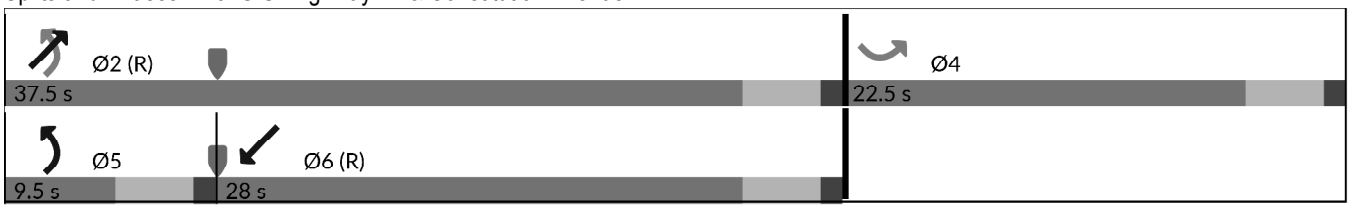
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	437	97	101	1446	736	334
Future Volume (vph)	437	97	101	1446	736	334
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.242			
Satd. Flow (perm)	3433	1583	451	3539	3539	1583
Satd. Flow (RTOR)		105				363
Lane Group Flow (vph)	475	105	110	1572	800	363
Turn Type	Perm	Free	pm+pt	NA	NA	Free
Protected Phases			5	2	6	
Permitted Phases	4	Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	
Minimum Split (s)	22.5		9.5	22.5	22.5	
Total Split (s)	22.5		9.5	37.5	28.0	
Total Split (%)	37.5%		15.8%	62.5%	46.7%	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	13.4	60.0	37.6	37.6	28.6	60.0
Actuated g/C Ratio	0.22	1.00	0.63	0.63	0.48	1.00
v/c Ratio	0.61	0.06	0.25	0.70	0.47	0.22
Control Delay (s/veh)	24.2	0.0	5.9	9.0	13.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.2	0.0	5.9	9.0	13.3	0.3
LOS	C	A	A	A	B	A
Approach Delay (s/veh)	19.9			8.8	9.3	
Approach LOS	B			A	A	
Queue Length 50th (ft)	79	0	13	164	105	0
Queue Length 95th (ft)	111	0	28	234	165	0
Internal Link Dist (ft)	532			1032	1341	
Turn Bay Length (ft)	155	155	1000			675
Base Capacity (vph)	1029	1583	424	2215	1685	1583
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	0.46	0.07	0.26	0.71	0.47	0.23

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

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 10.8	Intersection LOS: B
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 9: U.S. Highway 24 & Constitution Avenue



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	20	570	403	6	1098	205	795	336	1	140	681	12
Future Volume (vph)	20	570	403	6	1098	205	795	336	1	140	681	12
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			438			170			145			145
Lane Group Flow (vph)	22	620	438	7	1193	223	864	365	1	152	740	13
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	46.0		8.0	46.0		34.0	53.0		13.0	32.0	
Total Split (%)	6.7%	38.3%		6.7%	38.3%		28.3%	44.2%		10.8%	26.7%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	46.5	120.0	5.0	43.3	120.0	31.2	49.5	120.0	9.4	27.7	120.0
Actuated g/C Ratio	0.04	0.39	1.00	0.04	0.36	1.00	0.26	0.41	1.00	0.08	0.23	1.00
v/c Ratio	0.30	0.45	0.27	0.09	0.93	0.14	0.96	0.25	0.00	0.56	0.90	0.00
Control Delay (s/veh)	66.6	28.8	0.4	58.3	51.3	0.1	67.7	24.0	0.0	52.4	63.5	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)	66.6	28.8	0.4	58.3	51.3	0.1	67.7	24.0	0.0	52.4	63.5	0.0
LOS	E	C	A	E	D	A	E	C	A	D	E	A
Approach Delay (s/veh)		18.1			43.4			54.7			60.8	
Approach LOS		B			D			D			E	
Queue Length 50th (ft)	17	178	0	5	480	0	343	97	0	46	261	0
Queue Length 95th (ft)	45	258	0	22	#635	0	#475	134	0	76	#399	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1372	1583	73	1277	1583	892	1458	1583	286	816	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	0.30	0.45	0.28	0.10	0.93	0.14	0.97	0.25	0.00	0.53	0.91	0.01

Intersection Summary

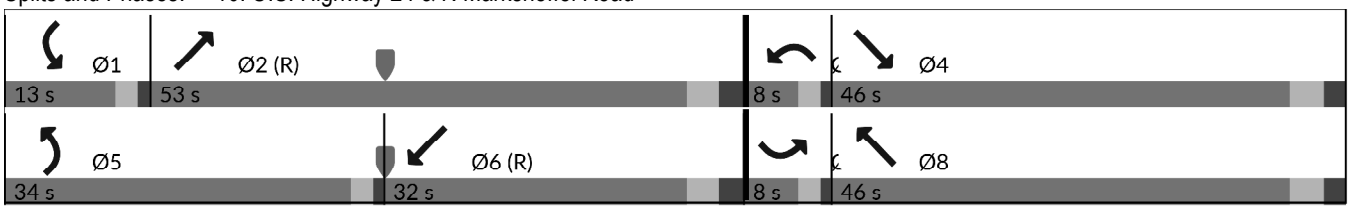
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 43.9	Intersection LOS: D
Intersection Capacity Utilization 83.5%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	2121	533	70	1624	15	144	336	67	12	349	62
Future Volume (vph)	75	2121	533	70	1624	15	144	336	67	12	349	62
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	82	2305	579	76	1765	16	157	365	73	13	379	67
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	14.2	68.5		12.5	66.8		15.0	26.0		13.0	24.0	
Total Split (%)	11.8%	57.1%		10.4%	55.7%		12.5%	21.7%		10.8%	20.0%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	6.6	63.9	120.0	5.2	62.6	120.0	7.0	25.4	120.0	5.0	15.6	120.0
Actuated g/C Ratio	0.06	0.53	1.00	0.04	0.52	1.00	0.06	0.21	1.00	0.04	0.13	1.00
v/c Ratio	0.43	0.85	0.36	0.51	0.66	0.01	0.78	0.48	0.04	0.09	0.82	0.04
Control Delay (s/veh)	62.4	28.7	0.6	68.7	23.4	0.0	90.9	47.5	0.0	56.7	66.7	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)	62.4	28.7	0.6	68.7	23.4	0.0	90.9	47.5	0.0	56.7	66.7	0.0
LOS	E	C	A	E	C	A	F	D	A	E	E	A
Approach Delay (s/veh)		24.2			25.1			53.2			56.8	
Approach LOS		C			C			D			E	
Queue Length 50th (ft)	32	568	0	30	376	0	64	113	0	5	152	0
Queue Length 95th (ft)	59	644	0	56	432	0	#121	192	0	15	#223	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	191	2709	1583	149	2651	1583	200	747	1583	143	471	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	0.43	0.85	0.37	0.51	0.67	0.01	0.79	0.49	0.05	0.09	0.80	0.04

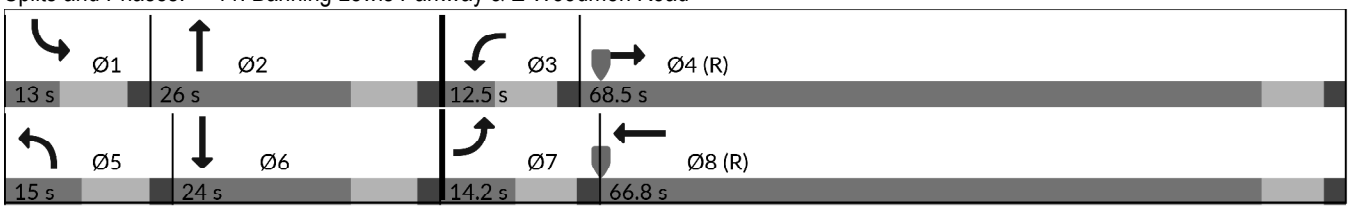
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 30.0	Intersection LOS: C
Intersection Capacity Utilization 74.4%	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: 11: Banning Lewis Parkway & E Woodmen Road



Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	2	2	1
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	1232	596	435
Demand Flow Rate, veh/h	1257	608	443
Vehicles Circulating, veh/h	90	380	712
Vehicles Exiting, veh/h	898	775	635
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.1	6.9	13.7
Approach LOS	A	A	B

Lane	Left	Right	Left	Right	Left
Designated Moves	LT	TR	LT	TR	LR
Assumed Moves	LT	TR	LT	TR	LR
RT Channelized					
Lane Util	0.470	0.530	0.470	0.530	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	591	666	286	322	443
Cap Entry Lane, veh/h	1243	1316	952	1028	775
Entry HV Adj Factor	0.980	0.980	0.979	0.981	0.982
Flow Entry, veh/h	579	653	280	316	435
Cap Entry, veh/h	1217	1290	932	1008	761
V/C Ratio	0.476	0.506	0.301	0.313	0.571
Control Delay, s/veh	8.0	8.1	7.0	6.8	13.7
LOS	A	A	A	A	B
95th %tile Queue, veh	3	3	1	1	4

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	760	508	326	382
Demand Flow Rate, veh/h	775	518	333	390
Vehicles Circulating, veh/h	300	396	630	517
Vehicles Exiting, veh/h	607	567	445	397
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	6.4	9.3	9.1
Approach LOS	A	A	A	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.469	0.531	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	364	411	243	275	333	390
Cap Entry Lane, veh/h	1024	1100	938	1014	831	915
Entry HV Adj Factor	0.981	0.980	0.982	0.978	0.980	0.980
Flow Entry, veh/h	357	403	239	269	326	382
Cap Entry, veh/h	1005	1079	921	992	814	897
V/C Ratio	0.355	0.373	0.259	0.271	0.401	0.426
Control Delay, s/veh	7.3	7.2	6.6	6.3	9.3	9.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	2	2

Intersection	
Intersection Delay, s/veh	4.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	123	331	185
Demand Flow Rate, veh/h	126	337	189
Vehicles Circulating, veh/h	158	46	110
Vehicles Exiting, veh/h	141	238	273
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.0	5.0	4.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	126	337	189
Cap Entry Lane, veh/h	1174	1317	1233
Entry HV Adj Factor	0.980	0.982	0.979
Flow Entry, veh/h	123	331	185
Cap Entry, veh/h	1151	1293	1207
V/C Ratio	0.107	0.256	0.153
Control Delay, s/veh	4.0	5.0	4.3
LOS	A	A	A
95th %tile Queue, veh	0	1	1

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	233	518	344
Demand Flow Rate, veh/h	238	528	351
Vehicles Circulating, veh/h	241	80	227
Vehicles Exiting, veh/h	337	399	381
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	7.0	6.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	238	528	351
Cap Entry Lane, veh/h	1079	1272	1095
Entry HV Adj Factor	0.979	0.980	0.980
Flow Entry, veh/h	233	518	344
Cap Entry, veh/h	1056	1247	1073
V/C Ratio	0.221	0.415	0.321
Control Delay, s/veh	5.5	7.0	6.5
LOS	A	A	A
95th %tile Queue, veh	1	2	1

APPENDIX D

Additional Capacity Worksheets

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	1300	1043	6	766	99	391	457	4	342	1594	18
Future Volume (vph)	13	1300	1043	6	766	99	391	457	4	342	1594	18
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Satd. Flow (RTOR)			611			118			118			118
Lane Group Flow (vph)	14	1413	1134	7	833	108	425	497	4	372	1733	20
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	41.0		8.0	41.0		20.0	49.0		22.0	51.0	
Total Split (%)	6.7%	34.2%		6.7%	34.2%		16.7%	40.8%		18.3%	42.5%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	39.8	120.0	5.0	38.2	120.0	17.3	48.4	120.0	17.2	48.2	120.0
Actuated g/C Ratio	0.04	0.33	1.00	0.04	0.32	1.00	0.14	0.40	1.00	0.14	0.40	1.00
v/c Ratio	0.19	0.83	0.71	0.09	0.51	0.06	0.85	0.24	0.00	0.75	0.84	0.01
Control Delay (s/veh)	61.7	42.4	2.8	58.3	34.8	0.0	67.8	24.9	0.0	50.1	28.0	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)	61.7	42.4	2.8	58.3	34.8	0.0	67.8	24.9	0.0	50.1	28.0	0.0
LOS	E	D	A	E	C	A	E	C	A	D	C	A
Approach Delay (s/veh)		25.0			31.0			44.5			31.6	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	11	352	0	5	179	0	167	95	0	148	308	0
Queue Length 95th (ft)	33	#480	0	22	242	0	#255	127	0	m172	m340	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1688	1583	73	1620	1583	501	2049	1583	543	2044	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	0.19	0.84	0.72	0.10	0.51	0.07	0.85	0.24	0.00	0.69	0.85	0.01

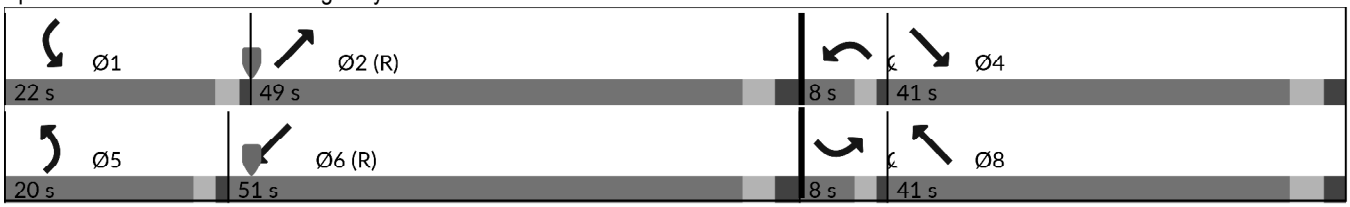
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 30.8	Intersection LOS: C
Intersection Capacity Utilization 78.7%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1420	159	76	2456	13	191	415	83	19	383	96
Future Volume (vph)	64	1420	159	76	2456	13	191	415	83	19	383	96
Satd. Flow (prot)	3433	6408	1583	3433	6408	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	6408	1583	3433	6408	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	70	1543	173	83	2670	14	208	451	90	21	416	104
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	63.7		14.3	65.5		17.0	29.0		13.0	25.0	
Total Split (%)	10.4%	53.1%		11.9%	54.6%		14.2%	24.2%		10.8%	20.8%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	5.2	59.5	120.0	6.7	60.9	120.0	9.0	28.4	120.0	5.0	16.6	120.0
Actuated g/C Ratio	0.04	0.50	1.00	0.06	0.51	1.00	0.08	0.24	1.00	0.04	0.14	1.00
v/c Ratio	0.47	0.48	0.10	0.43	0.82	0.00	0.80	0.53	0.05	0.14	0.85	0.06
Control Delay (s/veh)	67.1	21.4	0.1	62.2	28.4	0.0	77.9	46.2	0.0	57.8	67.4	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)	67.1	21.4	0.1	62.2	28.4	0.0	77.9	46.2	0.0	57.8	67.4	0.0
LOS	E	C	A	E	C	A	E	D	A	E	E	A
Approach Delay (s/veh)		21.2			29.3			49.5			54.1	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	27	237	0	32	517	0	83	157	0	8	167	0
Queue Length 95th (ft)	53	271	0	59	570	0	#147	237	0	22	#245	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	147	3175	1583	194	3252	1583	257	837	1583	143	501	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	0.48	0.49	0.11	0.43	0.82	0.01	0.81	0.54	0.06	0.15	0.83	0.07

Intersection Summary

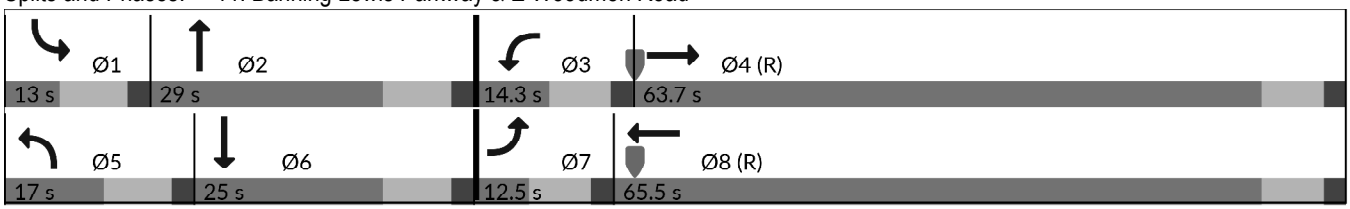
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay (s/veh): 31.7	Intersection LOS: C
Intersection Capacity Utilization 71.2%	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.

Splits and Phases: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	697	493	8	1343	250	975	1368	1	172	630	15
Future Volume (vph)	25	697	493	8	1343	250	975	1368	1	172	630	15
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Satd. Flow (RTOR)			536			244			145			145
Lane Group Flow (vph)	27	758	536	9	1460	272	1060	1487	1	187	685	16
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	43.0		8.0	43.0		44.0	55.0		14.0	25.0	
Total Split (%)	6.7%	35.8%		6.7%	35.8%		36.7%	45.8%		11.7%	20.8%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	41.6	120.0	5.0	38.4	120.0	39.9	53.4	120.0	10.4	23.9	120.0
Actuated g/C Ratio	0.04	0.35	1.00	0.04	0.32	1.00	0.33	0.45	1.00	0.09	0.20	1.00
v/c Ratio	0.36	0.43	0.33	0.12	0.89	0.17	0.92	0.65	0.00	0.62	0.67	0.01
Control Delay (s/veh)	70.3	30.9	0.5	59.2	47.4	0.2	53.0	28.5	0.0	65.0	55.0	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)	70.3	30.9	0.5	59.2	47.4	0.2	53.0	28.5	0.0	65.0	55.0	0.0
LOS	E	C	A	E	D	A	D	C	A	E	E	A
Approach Delay (s/veh)		19.4			40.1			38.7			56.1	
Approach LOS		B			D			D			E	
Queue Length 50th (ft)	21	154	0	7	395	0	401	342	0	72	157	0
Queue Length 95th (ft)	53	212	0	25	#467	0	#524	397	0	109	250	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1773	1583	73	1637	1583	1172	2261	1583	314	1011	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	0.37	0.43	0.34	0.12	0.89	0.17	0.90	0.66	0.00	0.60	0.68	0.01

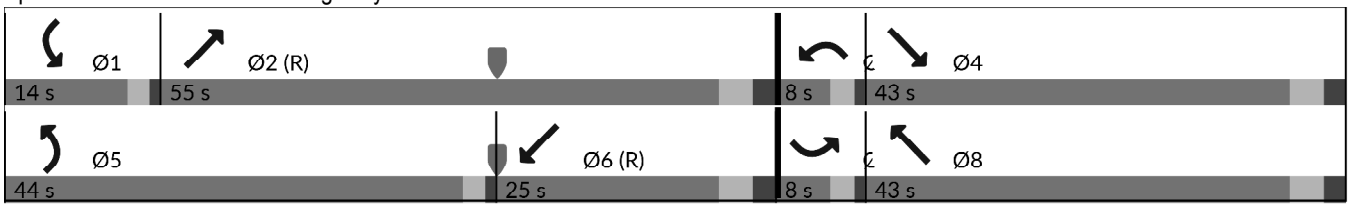
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 37.6	Intersection LOS: D
Intersection Capacity Utilization 77.6%	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: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	2315	278	122	1837	27	245	578	115	21	612	102
Future Volume (vph)	136	2315	278	122	1837	27	245	578	115	21	612	102
Satd. Flow (prot)	3433	6408	1583	3433	6408	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	6408	1583	3433	6408	1583	3433	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			255			255			255			255
Lane Group Flow (vph)	148	2516	302	133	1997	29	266	628	125	23	665	111
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	15.1	57.9		13.1	55.9		18.0	36.0		13.0	31.0	
Total Split (%)	12.6%	48.3%		10.9%	46.6%		15.0%	30.0%		10.8%	25.8%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	7.6	50.4	120.0	5.6	48.4	120.0	10.0	33.2	120.0	5.0	23.0	120.0
Actuated g/C Ratio	0.06	0.42	1.00	0.05	0.40	1.00	0.08	0.28	1.00	0.04	0.19	1.00
v/c Ratio	0.68	0.93	0.19	0.83	0.77	0.01	0.93	0.64	0.07	0.16	0.98	0.07
Control Delay (s/veh)	71.3	41.1	0.2	94.2	33.5	0.0	92.2	43.9	0.0	58.1	78.7	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)	71.3	41.1	0.2	94.2	33.5	0.0	92.2	43.9	0.0	58.1	78.7	0.0
LOS	E	D	A	F	C	A	F	D	A	E	E	A
Approach Delay (s/veh)		38.5			36.9			51.2			67.2	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	58	531	0	53	384	0	108	238	0	9	272	0
Queue Length 95th (ft)	#102	588	0	#110	431	0	#191	309	0	23	#396	0
Internal Link Dist (ft)		990			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	217	2691	1583	160	2584	1583	286	979	1583	143	678	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	0.68	0.93	0.19	0.83	0.77	0.02	0.93	0.64	0.08	0.16	0.98	0.07

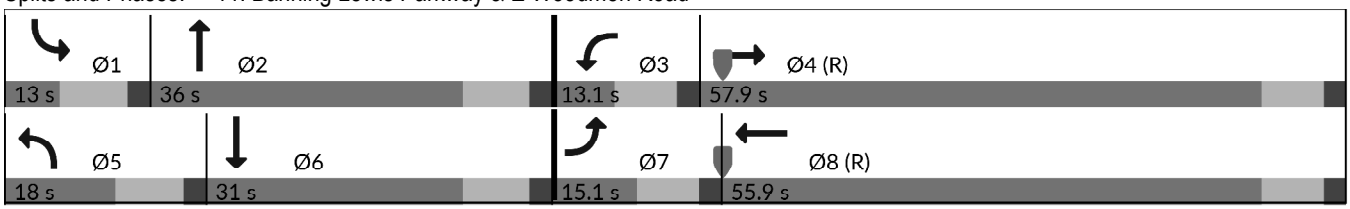
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay (s/veh): 43.1	Intersection LOS: D
Intersection Capacity Utilization 87.5%	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.

Splits and Phases: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	1293	180	199	2046	47	295	10	241	72	18	369
Future Volume (vph)	177	1293	180	199	2046	47	295	10	241	72	18	369
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.077			0.097			0.744			0.750		
Satd. Flow (perm)	278	5085	1583	181	5085	1583	1386	1863	1583	1397	1863	1583
Satd. Flow (RTOR)			196			114			225			177
Lane Group Flow (vph)	192	1405	196	216	2224	51	321	11	262	78	20	401
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)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	16.0
Total Split (s)	13.4	52.6	52.6	26.4	65.6	65.6	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (%)	11.2%	43.8%	43.8%	22.0%	54.7%	54.7%	34.2%	34.2%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0
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)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	8.0
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)	58.3	51.9	51.9	72.2	60.1	60.1	30.6	30.6	30.6	30.6	30.6	30.6
Actuated g/C Ratio	0.49	0.43	0.43	0.60	0.50	0.50	0.26	0.26	0.26	0.26	0.26	0.26
v/c Ratio	0.63	0.63	0.24	0.71	0.87	0.06	0.90	0.02	0.45	0.21	0.04	0.75
Control Delay (s/veh)	29.5	29.5	4.2	33.6	31.9	0.1	73.2	32.1	9.8	36.0	32.5	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.5	29.5	4.2	33.6	31.9	0.1	73.2	32.1	9.8	36.0	32.5	31.6
LOS	C	C	A	C	C	A	E	C	A	D	C	C
Approach Delay (s/veh)		26.8			31.5			44.5			32.4	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	30	321	0	88	562	0	235	6	21	47	11	159
Queue Length 95th (ft)	#78	398	48	171	638	0	#392	21	92	89	31	280
Internal Link Dist (ft)		975			516			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		150
Base Capacity (vph)	303	2201	796	361	2544	849	381	512	598	384	512	563
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	0.63	0.64	0.25	0.60	0.87	0.06	0.84	0.02	0.44	0.20	0.04	0.71

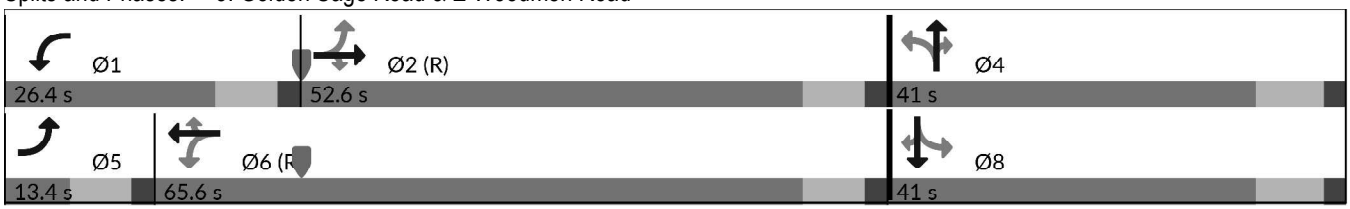
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay (s/veh): 31.4	Intersection LOS: C
Intersection Capacity Utilization 98.3%	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.

Splits and Phases: 3: Golden Sage Road & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	395	190	0	13	310	799	60	6	1910	0
Future Volume (vph)	0	0	395	190	0	13	310	799	60	6	1910	0
Satd. Flow (prot)	1863	1583	0	0	1763	0	1770	3504	0	1770	5085	1863
Flt Permitted					0.182		0.073			0.306		
Satd. Flow (perm)	1863	1583	0	0	336	0	136	3504	0	570	5085	1863
Satd. Flow (RTOR)		210			127			10				
Lane Group Flow (vph)	0	429	0	0	221	0	337	933	0	7	2076	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0		5.0	4.0		5.0	7.0		4.0	5.0	5.0
Minimum Split (s)	9.5	9.5		9.5	9.5		9.5	14.0		9.5	22.5	22.5
Total Split (s)	9.5	30.2		9.5	30.2		23.0	70.8		9.5	57.3	57.3
Total Split (%)	7.9%	25.2%		7.9%	25.2%		19.2%	59.0%		7.9%	47.8%	47.8%
Yellow Time (s)	3.5	3.5		3.5	3.0		3.5	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	2.0		1.0	2.5		1.0	2.0		2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.5			5.5		4.5	7.0		5.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)		34.2			34.2		75.8	71.4		55.8	51.3	
Actuated g/C Ratio		0.29			0.29		0.63	0.60		0.47	0.43	
v/c Ratio		0.71			1.18		1.00	0.44		0.02	0.95	
Control Delay (s/veh)		26.5			144.6		84.3	14.5		10.3	44.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		26.5			144.6		84.3	14.5		10.3	44.8	
LOS		C			F		F	B		B	D	
Approach Delay (s/veh)		26.6			144.7			33.1			44.8	
Approach LOS		C			F			C			D	
Queue Length 50th (ft)		155			~131		209	186		2	559	
Queue Length 95th (ft)		280			#293		#405	286		8	#679	
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)							150			545		
Base Capacity (vph)		601			186		337	2089		305	2173	
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		0.71			1.19		1.00	0.45		0.02	0.96	

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

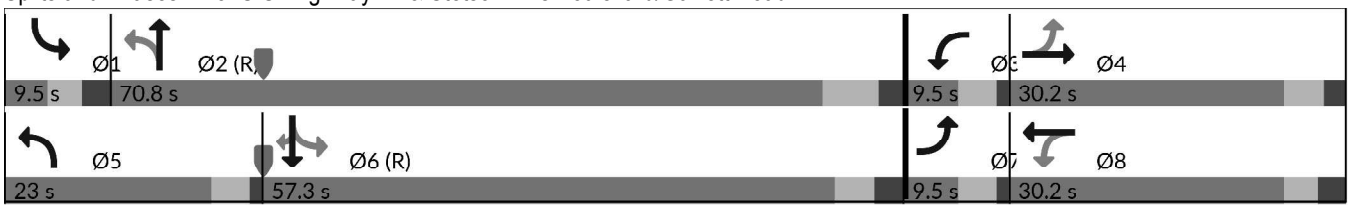
Maximum v/c Ratio: 1.19

Intersection Signal Delay (s/veh): 44.6	Intersection LOS: D
Intersection Capacity Utilization 107.8%	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: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	13	1300	1043	6	766	99	391	670	4	342	1867	18
Future Volume (vph)	13	1300	1043	6	766	99	391	670	4	342	1867	18
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	5085	1583	3433	5085	1583
Satd. Flow (RTOR)			573			145			145			145
Lane Group Flow (vph)	14	1413	1134	7	833	108	425	728	4	372	2029	20
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	39.0		8.0	39.0		18.0	51.0		22.0	55.0	
Total Split (%)	6.7%	32.5%		6.7%	32.5%		15.0%	42.5%		18.3%	45.8%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	39.7	120.0	5.0	38.1	120.0	15.7	48.5	120.0	17.2	50.0	120.0
Actuated g/C Ratio	0.04	0.33	1.00	0.04	0.32	1.00	0.13	0.40	1.00	0.14	0.42	1.00
v/c Ratio	0.19	0.84	0.71	0.09	0.51	0.06	0.94	0.35	0.00	0.75	0.95	0.01
Control Delay (s/veh)	61.7	42.9	2.8	58.3	35.2	0.0	82.7	25.9	0.0	59.6	46.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.7	42.9	2.8	58.3	35.2	0.0	82.7	25.9	0.0	59.6	46.1	0.0
LOS	E	D	A	E	D	A	F	C	A	E	D	A
Approach Delay (s/veh)		25.3			31.4			46.7			47.9	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	11	358	0	5	182	0	172	145	0	143	549	0
Queue Length 95th (ft)	33	#505	0	22	248	0	#278	182	0	194	#668	0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1680	1583	73	1612	1583	450	2056	1583	543	2118	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	0.19	0.84	0.72	0.10	0.52	0.07	0.94	0.35	0.00	0.69	0.96	0.01

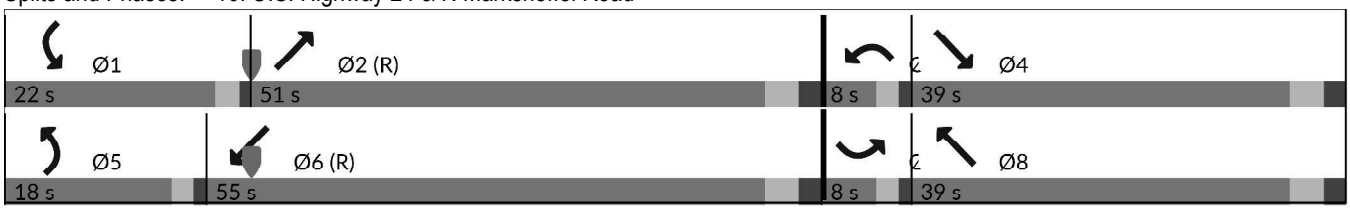
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay (s/veh): 37.3	Intersection LOS: D
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.

Splits and Phases: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1548	567	76	2621	13	708	415	83	19	383	96
Future Volume (vph)	64	1548	567	76	2621	13	708	415	83	19	383	96
Satd. Flow (prot)	3433	6408	1583	3433	6408	1583	4990	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	6408	1583	3433	6408	1583	4990	3539	1583	3433	3539	1583
Satd. Flow (RTOR)			262			262			262			262
Lane Group Flow (vph)	70	1683	616	83	2849	14	770	451	90	21	416	104
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	12.5	71.0		15.0	73.5		40.0	51.0		13.0	24.0	
Total Split (%)	8.3%	47.3%		10.0%	49.0%		26.7%	34.0%		8.7%	16.0%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	Max		None	None	
Act Effct Green (s)	5.0	63.7	150.0	7.3	66.0	150.0	28.5	48.2	150.0	5.0	19.5	150.0
Actuated g/C Ratio	0.03	0.42	1.00	0.05	0.44	1.00	0.19	0.32	1.00	0.03	0.13	1.00
v/c Ratio	0.61	0.61	0.38	0.49	1.01	0.00	0.81	0.39	0.05	0.18	0.90	0.06
Control Delay (s/veh)	93.7	34.9	0.7	79.9	61.0	0.0	65.5	41.9	0.0	74.3	87.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	93.7	34.9	0.7	79.9	61.0	0.0	65.5	41.9	0.0	74.3	87.1	0.0
LOS	F	C	A	E	E	A	E	D	A	E	F	A
Approach Delay (s/veh)		27.8			61.3			53.0			69.9	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)	35	371	0	41	~823	0	257	191	0	10	215	0
Queue Length 95th (ft)	#69	411	0	71	#908	0	300	245	0	26	#355	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	114	2720	1583	171	2819	1583	1064	1137	1583	114	460	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	0.61	0.62	0.39	0.49	1.01	0.01	0.72	0.40	0.06	0.18	0.90	0.07

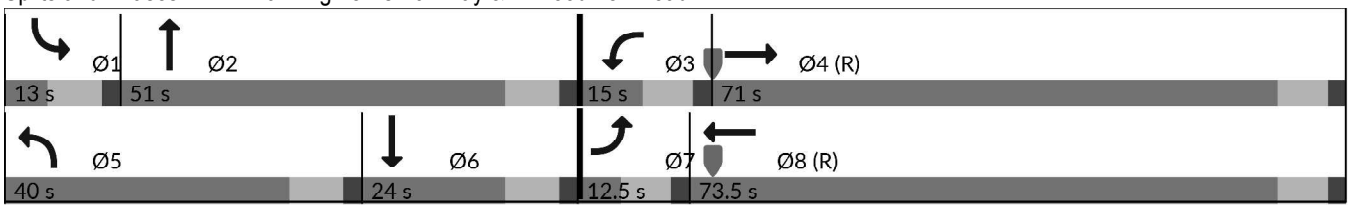
Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 147.5 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay (s/veh): 49.3	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
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: 11: Banning Lewis Parkway & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1922	329	243	1562	87	269	20	166	86	25	294
Future Volume (vph)	366	1922	329	243	1562	87	269	20	166	86	25	294
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.076			0.070			0.740			0.743		
Satd. Flow (perm)	275	5085	1583	130	5085	1583	1378	1863	1583	1384	1863	1583
Satd. Flow (RTOR)			358			114			180			230
Lane Group Flow (vph)	398	2089	358	264	1698	95	292	22	180	93	27	320
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)	4.0	4.0	4.0	4.0	4.0	4.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	11.5	11.5	11.5	11.5	11.5	11.5	16.0	16.0	16.0	16.0	16.0	16.0
Total Split (s)	21.6	62.0	62.0	23.0	63.4	63.4	35.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	18.0%	51.7%	51.7%	19.2%	52.8%	52.8%	29.2%	29.2%	29.2%	29.2%	29.2%	29.2%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0
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)	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0	8.0	8.0
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)	68.2	55.2	55.2	72.5	57.3	57.3	26.6	26.6	26.6	26.6	26.6	26.6
Actuated g/C Ratio	0.57	0.46	0.46	0.60	0.48	0.48	0.22	0.22	0.22	0.22	0.22	0.22
v/c Ratio	0.79	0.89	0.38	0.92	0.69	0.11	0.95	0.05	0.36	0.30	0.06	0.60
Control Delay (s/veh)	52.2	11.1	0.8	70.7	26.7	2.4	87.9	37.0	7.7	41.9	37.2	17.4
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)	52.2	11.1	0.8	70.7	26.7	2.4	87.9	37.0	7.7	41.9	37.2	17.4
LOS	D	B	A	E	C	A	F	D	A	D	D	B
Approach Delay (s/veh)		15.6			31.3			56.5			23.8	
Approach LOS		B			C			E			C	
Queue Length 50th (ft)	125	90	0	153	376	0	224	13	0	60	17	58
Queue Length 95th (ft)	m125	m89	m0	#313	434	21	#396	36	58	111	42	156
Internal Link Dist (ft)		975			666			436			176	
Turn Bay Length (ft)			395	300		385	120		190	115		
Base Capacity (vph)	530	2339	921	290	2429	815	310	419	495	311	419	534
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	0.75	0.89	0.39	0.91	0.70	0.12	0.94	0.05	0.36	0.30	0.06	0.60

Intersection Summary

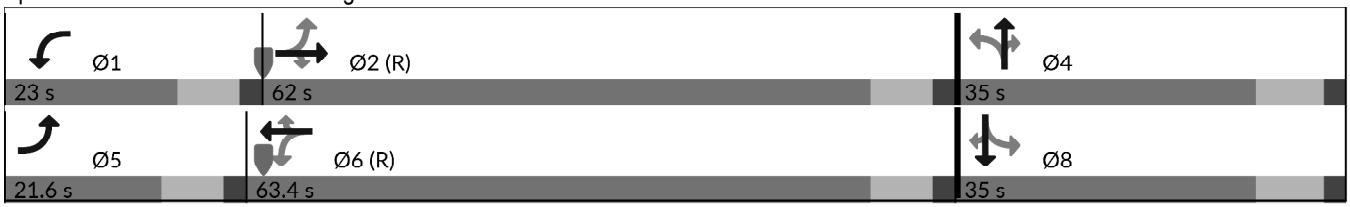
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay (s/veh): 25.2	Intersection LOS: C
Intersection Capacity Utilization 91.3%	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: 3: Golden Sage Road & E Woodmen Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	220	95	0	1	294	1774	272	14	1005	0
Future Volume (vph)	0	0	220	95	0	1	294	1774	272	14	1005	0
Satd. Flow (prot)	1863	1583	0	0	1773	0	1770	4984	0	1770	5085	1863
Flt Permitted					0.240		0.249			0.055		
Satd. Flow (perm)	1863	1583	0	0	447	0	464	4984	0	102	5085	1863
Satd. Flow (RTOR)		185			74			53				
Lane Group Flow (vph)	0	239	0	0	104	0	320	2224	0	15	1092	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	Perm
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		4.0	4.0		7.0	7.0		4.0	5.0	5.0
Minimum Split (s)	22.5	22.5		9.5	9.5		14.0	14.0		9.5	22.5	22.5
Total Split (s)	22.5	22.5		22.5	22.5		108.0	108.0		9.5	117.5	117.5
Total Split (%)	16.1%	16.1%		16.1%	16.1%		77.1%	77.1%		6.8%	83.9%	83.9%
Yellow Time (s)	3.5	3.5		3.0	3.0		5.0	5.0		3.0	3.5	3.5
All-Red Time (s)	1.0	1.0		2.5	2.5		2.0	2.0		2.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5			5.5		7.0	7.0		5.5	4.5	4.5
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Max	C-Max		None	C-Max	C-Max
Act Effct Green (s)		17.6			16.6		107.1	107.1		112.4	113.4	
Actuated g/C Ratio		0.13			0.12		0.77	0.77		0.80	0.81	
v/c Ratio		0.66			0.88		0.90	0.58		0.11	0.26	
Control Delay (s/veh)		24.6			77.5		45.6	7.9		4.5	3.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		24.6			77.5		45.6	7.9		4.5	3.4	
LOS		C			E		D	A		A	A	
Approach Delay (s/veh)		24.7			77.5			12.7			3.4	
Approach LOS		C			E			B			A	
Queue Length 50th (ft)		45			28		169	233		2	74	
Queue Length 95th (ft)		139			#147		#481	365		7	86	
Internal Link Dist (ft)		1326			349			1813			859	
Turn Bay Length (ft)							150			545		
Base Capacity (vph)		364			119		354	3825		133	4118	
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		0.66			0.87		0.90	0.58		0.11	0.27	

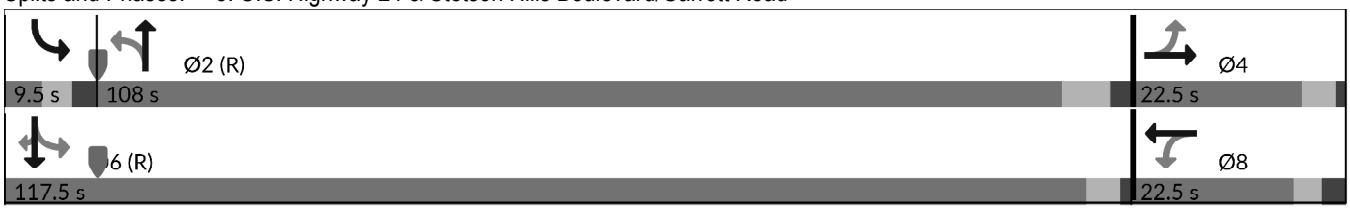
Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 12.5	Intersection LOS: B
Intersection Capacity Utilization 81.4%	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: 8: U.S. Highway 24 & Stetson Hills Boulevard/Garrett Road



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	697	493	8	1343	250	975	1586	1	172	796	15
Future Volume (vph)	25	697	493	8	1343	250	975	1586	1	172	796	15
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	5085	1583	1770	5085	1583
Satd. Flow (RTOR)			536			244			145			145
Lane Group Flow (vph)	27	758	536	9	1460	272	1060	1724	1	187	865	16
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)	8.0	10.0		8.0	10.0		8.0	10.0		8.0	10.0	
Total Split (s)	8.0	41.0		8.0	41.0		42.0	53.0		18.0	29.0	
Total Split (%)	6.7%	34.2%		6.7%	34.2%		35.0%	44.2%		15.0%	24.2%	
Yellow Time (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	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)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	5.0	40.9	120.0	5.0	37.7	120.0	38.9	49.6	120.0	14.8	25.5	120.0
Actuated g/C Ratio	0.04	0.34	1.00	0.04	0.31	1.00	0.32	0.41	1.00	0.12	0.21	1.00
v/c Ratio	0.36	0.43	0.33	0.12	0.91	0.17	0.95	0.81	0.00	0.85	0.80	0.01
Control Delay (s/veh)	70.3	31.7	0.5	59.2	49.5	0.2	57.5	35.6	0.0	80.7	56.6	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)	70.3	31.7	0.5	59.2	49.5	0.2	57.5	35.6	0.0	80.7	56.6	0.0
LOS	E	C	A	E	D	A	E	D	A	F	E	A
Approach Delay (s/veh)		19.9			41.9			44.0			60.0	
Approach LOS		B			D			D			E	
Queue Length 50th (ft)	21	158	0	7	406	0	411	437	0	144	189	0
Queue Length 95th (ft)	53	218	0	25	#508	0	#548	504	0	#261	#308	m0
Internal Link Dist (ft)		579			458			1136			859	
Turn Bay Length (ft)	375		495	300		375	1000		560	720		670
Base Capacity (vph)	73	1734	1583	73	1599	1583	1122	2103	1583	224	1081	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	0.37	0.44	0.34	0.12	0.91	0.17	0.94	0.82	0.00	0.83	0.80	0.01

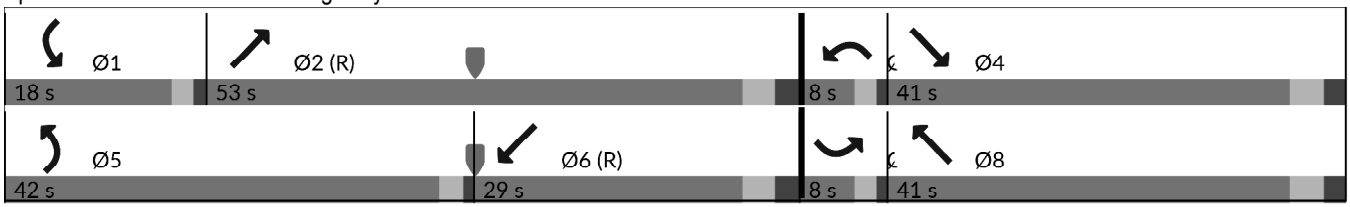
Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay (s/veh): 41.3	Intersection LOS: D
Intersection Capacity Utilization 80.8%	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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: U.S. Highway 24 & N Marksheffel Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	2482	654	122	1975	27	521	578	115	21	612	102
Future Volume (vph)	136	2482	654	122	1975	27	521	578	115	21	612	102
Satd. Flow (prot)	3433	6408	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	6408	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Satd. Flow (RTOR)			327			327			327			327
Lane Group Flow (vph)	148	2698	711	133	2147	29	566	628	125	23	665	111
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)	12.5	12.5		12.5	12.5		13.0	13.0		13.0	13.0	
Total Split (s)	15.1	57.1		12.9	54.9		27.0	37.0		13.0	23.0	
Total Split (%)	12.6%	47.6%		10.8%	45.8%		22.5%	30.8%		10.8%	19.2%	
Yellow Time (s)	5.5	5.5		5.5	5.5		6.0	6.0		6.0	6.0	
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)	7.5	7.5		7.5	7.5		8.0	8.0		8.0	8.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	7.6	49.6	120.0	5.4	47.4	120.0	17.7	34.2	120.0	5.0	16.3	120.0
Actuated g/C Ratio	0.06	0.41	1.00	0.05	0.40	1.00	0.15	0.29	1.00	0.04	0.14	1.00
v/c Ratio	0.68	1.01	0.44	0.86	0.84	0.01	0.76	0.43	0.07	0.16	0.96	0.07
Control Delay (s/veh)	71.3	57.5	0.9	96.2	22.7	0.0	54.1	37.5	0.0	58.1	78.8	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)	71.3	57.5	0.9	96.2	22.7	0.0	54.1	37.5	0.0	58.1	78.8	0.0
LOS	E	E	A	F	C	A	D	D	A	E	E	A
Approach Delay (s/veh)		46.8			26.7			41.1			67.3	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	58	~643	0	56	185	0	145	158	0	9	~201	0
Queue Length 95th (ft)	#102	#714	0	m#94	m248	m0	m182	m198	m0	23	#289	0
Internal Link Dist (ft)		1029			1090			766			652	
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	217	2648	1583	154	2531	1583	790	1448	1583	143	688	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	0.68	1.02	0.45	0.86	0.85	0.02	0.72	0.43	0.08	0.16	0.97	0.07

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

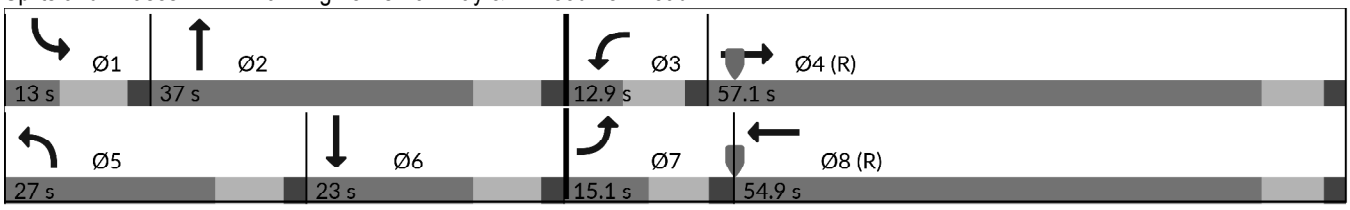
Intersection Signal Delay (s/veh): 42.1	Intersection LOS: D
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

~ 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: 11: Banning Lewis Parkway & E Woodmen Road

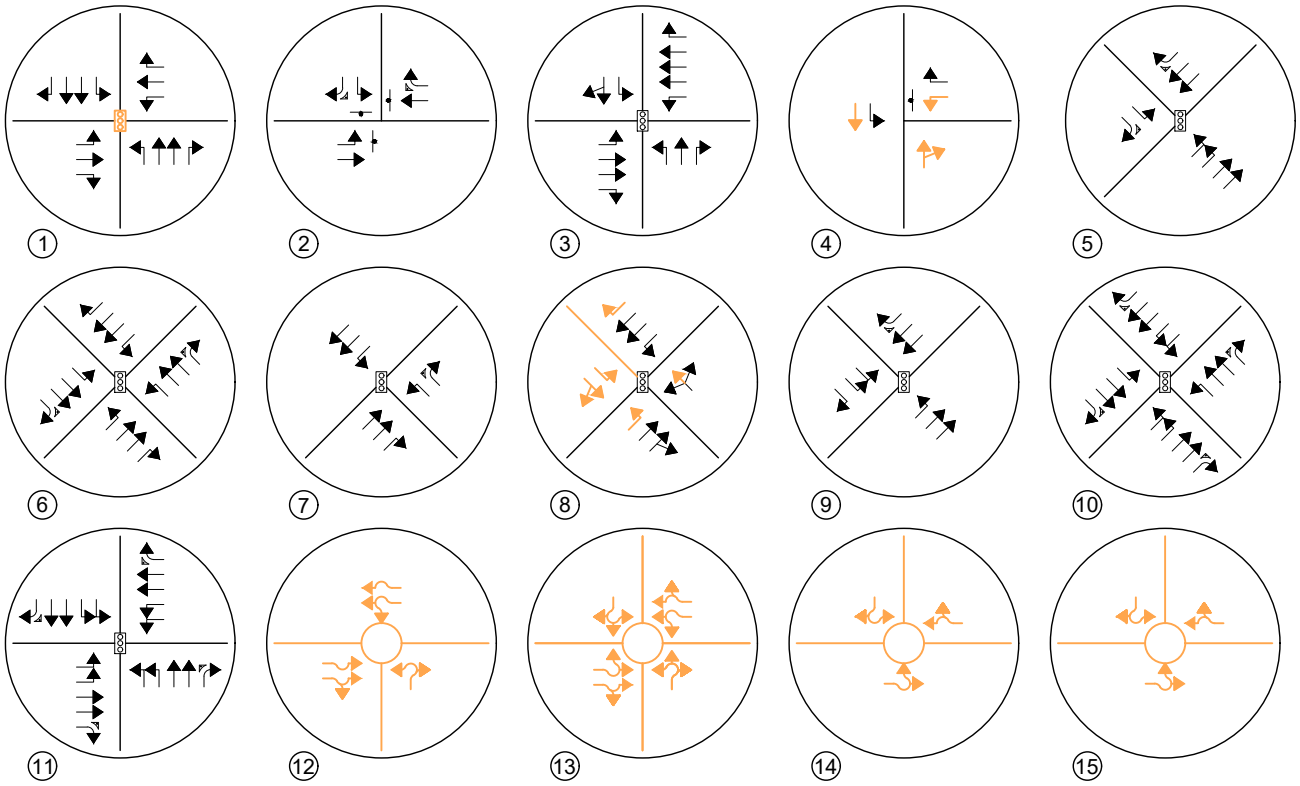


APPENDIX E

Recommended Intersection Geometry

North

Not to Scale



LEGEND

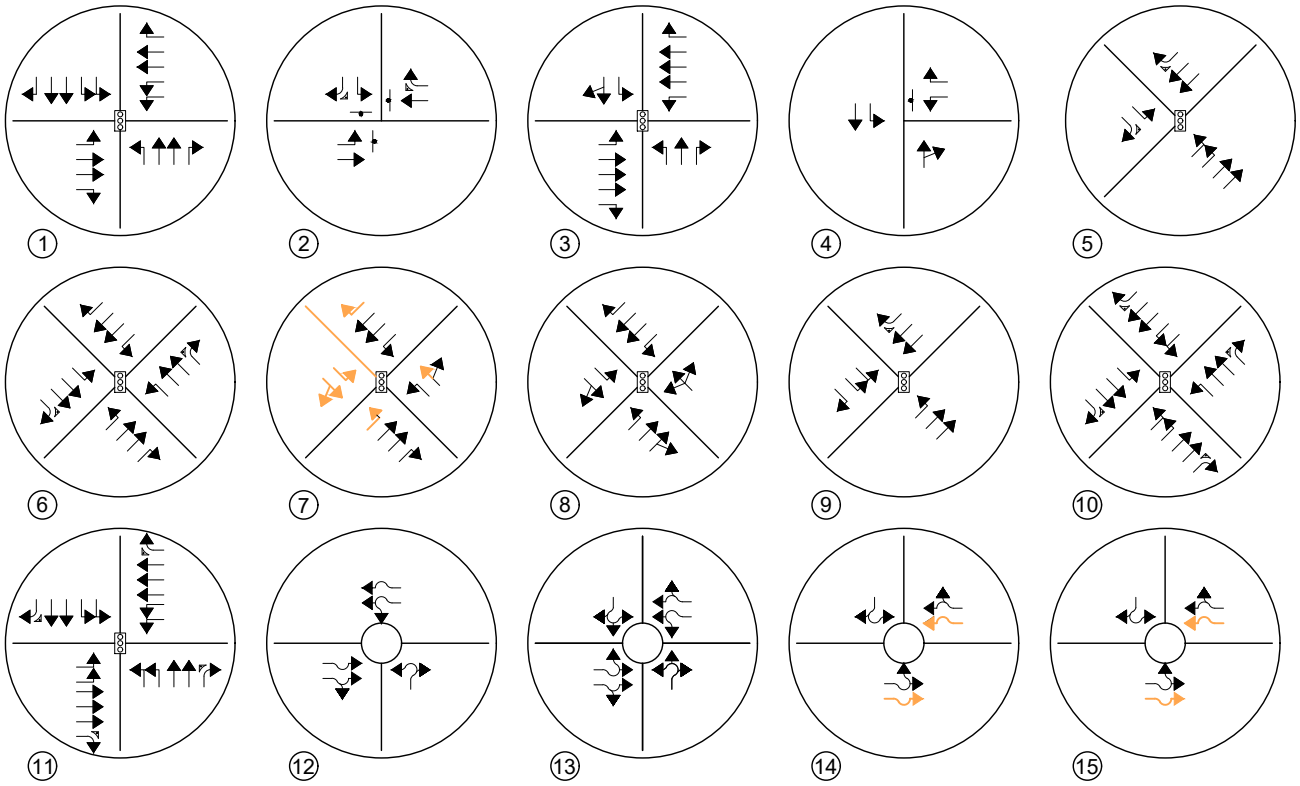
Study Intersection Lane Geometry

Existing Movement

Recommended Movement

North

Not to Scale



LEGEND

Study Intersection Lane Geometry

Existing Movement

Recommended Movement