

# TRAFFIC IMPACT STUDY

For

**12057 Highway 24 Multifamily Rezone**  
**El Paso County, Colorado**  
PCD Number P264

January 2026  
Revised April 2026

Prepared for:

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213 Tonn Valley  
Evergreen, Colorado 80439

Prepared by:



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25-122547

**Traffic Engineer's Statement**

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



\_\_\_\_\_  
Fred Lantz, P.E. #23410

\_\_\_\_\_  
04/17/2026

Date

**Developer's Statement**

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

\_\_\_\_\_  
James Kyle  
213 Tonn Valley  
Evergreen, Colorado 80439

\_\_\_\_\_  
Date

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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 12057 Highway 24 Multifamily Rezone. This analysis was prepared in accordance with Appendix B of the County's Engineering Criteria Manual (ECM)<sup>1</sup>.

This traffic impact study has been revised to address review comments made to the January 2026 version of this report regarding roadway classification updates, the addition of adjacent development volumes, and minor updates to study text, tables, and figures throughout.

This proposed development consists of a multifamily residential community and is located to the northeast of U.S. Highway 24 and Meridian Road in El Paso County, Colorado.

### Study Area Boundaries

The study area to be examined in this analysis encompasses the U.S. Highway 24 intersections with Meridian Road, Old Meridian Road, and E Woodmen Road and includes the proposed site access.

Consistent with Section B.2.3.B of El Paso County's ECM, the study area did not extend west towards Meridian Road and north towards Rolling Thunder Way since the development's trip distribution pattern does not anticipate that this intersection will be impacted by greater than 10 percent during the morning and afternoon peak traffic hours.

Figure 1 illustrates location of the site and study intersections.

### Site Description

Land for the development is currently occupied by one single-family detached home and zoned as Residential Rural (RR-5). The area is surrounded by commercial, industrial, institutional, and residential land uses.

The proposed development will rezone the approximate 13.48 acre site to Residential Multi-Dwelling (RM-30), a zoning district intended to accommodate moderate-density multi-dwelling development. It is further understood, through client coordination, that CDOT will acquire an approximate 1.66 acres of the existing 13.48 acre site to use as right-of-way for the future U.S. Highway 24 expansion. Therefore, for purposes of this analysis, there is assumed to be construction for approximately 349 multifamily dwelling units.

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<sup>1</sup> El Paso County Engineering Criteria Manual, El Paso County, January 2025.

Proposed access to the development is provided via a three-quarter access with left turns out onto U.S. Highway 24 (referred to as Site Access).

For purposes of this study, it is anticipated that development construction would be completed by end of Year 2028.

General site and access locations are shown on Figure 1.



## Existing and Committed Surface Transportation Network

Within the study area, U.S. Highway 24 is the primary roadway that will accommodate traffic to and from the proposed development. The secondary roadways include Meridian Road, Old Meridian Road, and E Woodmen Road. A brief description of each roadway, based on El Paso County's ECM and Major Transportation Corridor Plan (MTCP)<sup>2</sup> and the City of Colorado Springs Major Thoroughfare Plan (MTP)<sup>3</sup>, is provided below:

U.S. Highway 24 is a generally a north-south state roadway having two through lanes (one lane in each direction) with exclusive turn lanes at the intersections 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 generally an east-west roadway within the study area having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. El Paso County defines Meridian Road as an urban minor arterial roadway north of U.S. Highway 24 and is divided while Colorado Springs defines Meridian Road as a principal arterial roadway south of U.S. Highway 24. Meridian Road provides a posted speed limit of 40 MPH.

Old Meridian Road is a generally an east-west urban major collector roadway having a three-lane cross section (one lane in each direction with a center two-way left-turn lane) with a posted speed limit of 35 MPH north of U.S. Highway 24. South of U.S. Highway 24 Old Meridian Road is a rural major collector roadway having two through lanes (one lanes in each direction). Old Meridian Road provides exclusive turn lanes at the intersection within the study area.

E Woodmen Road is generally an east-west urban expressway roadway having four through lanes (two lanes in each direction) with exclusive turn lanes at the intersection within the study area. E Woodmen Road provides a posted speed limit of 45 MPH.

The U.S. Highway 24 intersections with Meridian Road and E Woodmen 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 the U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report<sup>4</sup>, it was recommended that various intersection improvements are made to the U.S. Highway 24 intersections with Meridian Road and E Woodmen Road as well as U.S. Highway 24 be widened from two to four through lanes north of Garrett Road. This widening was recommended to occur by Year 2027.

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<sup>2</sup> El Paso County Major Transportation Corridors Plan, Felsburg Holt & Ullevig, July 18, 2024.

<sup>3</sup> City of Colorado Springs Major Thoroughfare Plan, City of Colorado Springs, Department of Public Works, May 16, 2025.

<sup>4</sup> U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report, HDR, Inc., August 2024.

Pursuant to The Commons at Falcon Field Filing Nos. 1, 2, and 3 Traffic Impact Study Addendum<sup>5</sup>, E Woodmen Road will be extended east of U.S. Highway 24 upon buildout of the Commons at Falcon Field development.

Additionally, pursuant to El Paso County's MTCP, E Woodmen Road is planned to be widened from four to six through lanes. This widening is planned to be completed by Year 2045.

No other regional or specific improvements for the above-described roadways are known to be planned or committed at this time.

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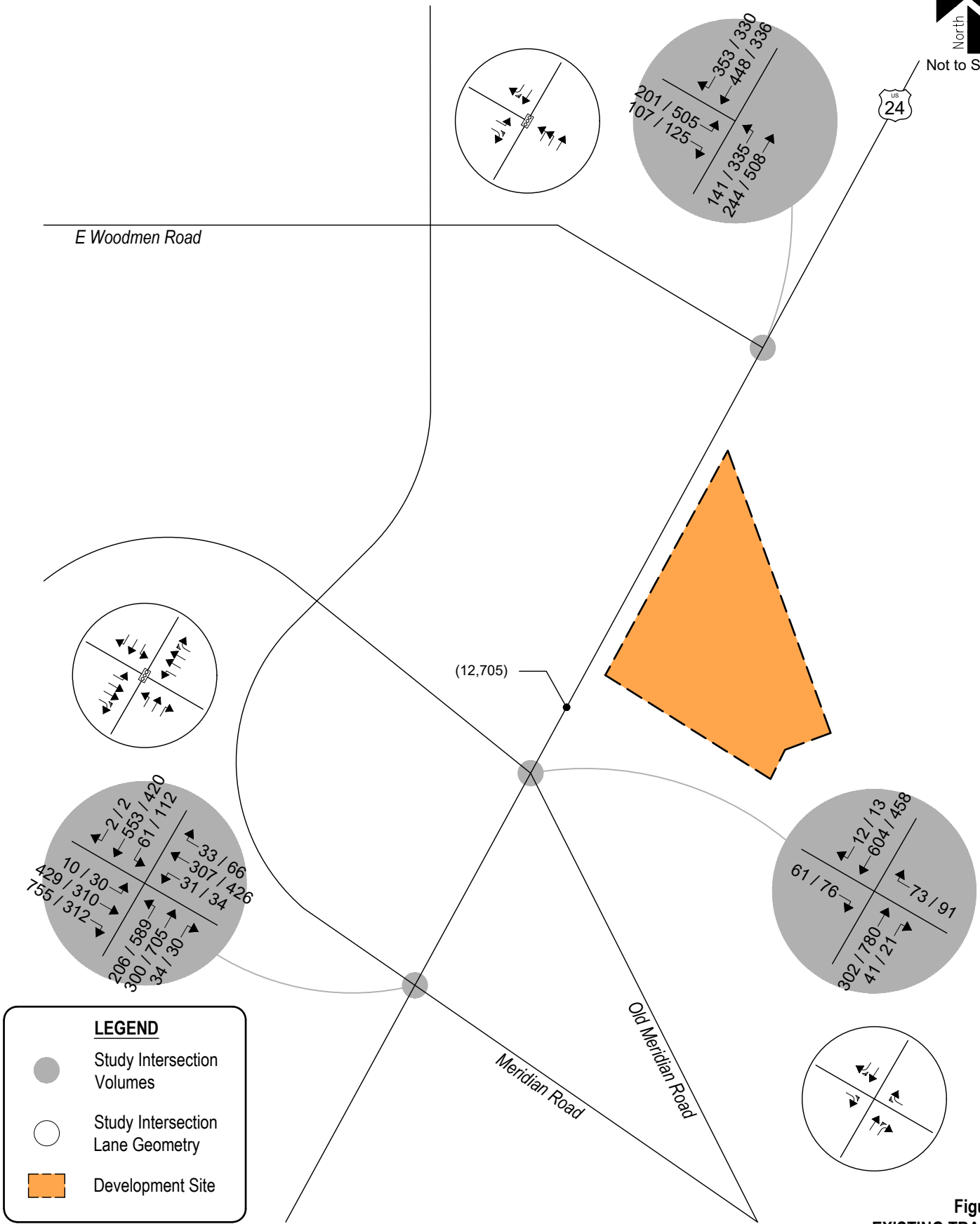
<sup>5</sup> The Commons at Falcon Field Filing Nos. 1, 2, and 3: Traffic Impact Study (TIS) Addendum, LSC Transportation Consultants, Inc. April 2025.

## II. Existing Traffic Conditions

Morning (AM) and afternoon (PM) peak hour traffic counts were collected at the U.S. Highway 24 intersections with Meridian Road, Old Meridian Road, and E Woodmen Road. Average daily traffic (ADT) volumes were collected over a 24-hour period on U.S. Highway 24. Counts were collected on Tuesday, December 16, 2025, with AM peak hour counts being collected during the period of 7:00 a.m. to 9:00 a.m. and PM peak hour counts being collected during the period of 4:00 p.m. to 6:00 p.m.

Existing volumes and intersection geometry are shown in Figure 2. Traffic count data is included for reference in Appendix A.

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



**Figure 2**  
**EXISTING TRAFFIC**  
 Volumes & Intersection Geometry  
 AM / PM Peak Traffic Hour  
 (ADT) : Average Daily Traffic

## Peak Hour Intersection Levels of Service – Existing Traffic

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

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

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

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

**Table 1 – Intersection Capacity Analysis Summary – Existing Traffic**

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
U.S. Highway 24 / Meridian Road (Signalized)	C (23.8)	D (35.8)
U.S. Highway 24 / E Woodmen Road (Signalized)	B (16.2)	C (28.7)
U.S. Highway 24 / Old Meridian Road (Stop-Controlled)		
Eastbound Right	A	A
Westbound 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 U.S. Highway 24 and Meridian Road provides overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

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

Considering the existing intersection of U.S. Highway 24 with Old Meridian Road provides right-turn acceleration lanes for each direction, all movements are expected to operate as free-flow and therefore are not expected to experience any delay or queueing.

### 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 2028 and 2045, a compounded annual growth rate was determined using historical traffic data for the surrounding area provided by CDOT's Online Transportation Information System (OTIS) along the adjacent segment of U.S. Highway 24, which anticipates a 20-year growth rate between one and two percent. Therefore, in order to provide for a conservative analysis, a growth rate of approximately two percent was applied to existing traffic volumes.

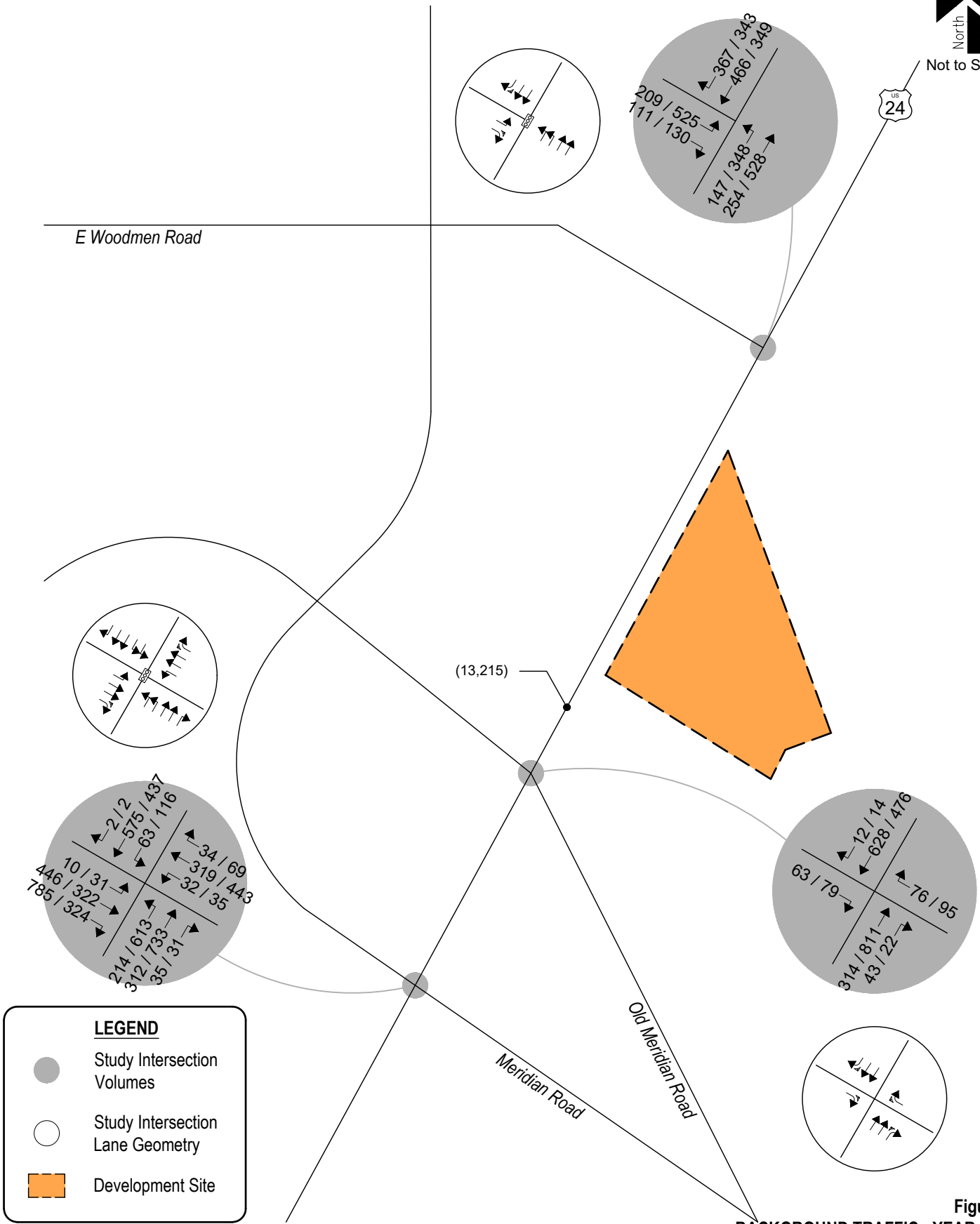
To account for projected traffic from adjacent developments not yet built, trip generations from the adjacent The Commons at Falcon Field – Preliminary Plan Traffic Impact Study<sup>6</sup> were added to background traffic volumes.

Pursuant to the area roadway improvements discussed in Section I, Year 2028 background traffic conditions assumes that U.S. Highway 24 is widened from two to four through lanes and that intersection geometry matches that analyzed within the U.S. Highway 24 – Garrett Road to Woodmen Road Traffic and Safety Report. Year 2045 background traffic conditions assumes that E Woodmen Road is widened from four to six through lanes and that the west leg of E Woodmen Road and U.S. Highway 24 is completed. Years 2028 and 2045 assume existing signal timing parameters for the U.S. Highway 24 intersections with Meridian Road and E Woodmen Road with optimized intersection splits in effort to better intersection performance.

Projected background traffic volumes and intersection geometry for Years 2028 and 2045 are shown in Figure 3 and Figure 4, respectively.

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<sup>6</sup> The Commons at Falcon Field – Preliminary Plan: Traffic Impact Study, LSC Transportation Consultants, June 2024.





**Figure 4**  
**BACKGROUND TRAFFIC - YEAR 2045**  
 Volumes & Intersection Geometry  
 AM / PM Peak Traffic Hour  
 (ADT) : Average Daily Traffic

**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 2028 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 2028**

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
U.S. Highway 24 / Meridian Road (Signalized)	C (27.2)	D (36.5)
U.S. Highway 24 / E Woodmen Road (Signalized)	B (18.6)	C (30.6)
U.S. Highway 24 / Old Meridian Road (Stop-Controlled)		
Eastbound Right	A	A
Westbound Right	A	A

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

**Background Traffic Analysis Results – Year 2028**

Year 2028 background traffic analysis indicates that the signalized intersection of U.S. Highway 24 and Meridian Road is expected to provide overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

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

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

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
U.S. Highway 24 / Meridian Road (Signalized)	C (32.3)	D (45.0)
U.S. Highway 24 / E Woodmen Road (Signalized)	C (30.4)	E (73.8)
U.S. Highway 24 / Old Meridian Road (Stop-Controlled)		
Eastbound Right	A	A
Westbound Right	A	A

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

### **Background Traffic Analysis Results – Year 2045**

By Year 2045 and without the proposed development, the signalized intersection of U.S. Highway 24 and Meridian Road is projected to maintain overall operations at LOS C during the morning peak traffic hour and LOS D during the afternoon peak traffic hour.

The signalized intersection of U.S. Highway 24 and E Woodmen Road is expected to maintain overall operations at LOS C during the morning peak traffic hour and LOS E during the afternoon peak traffic hour. The LOS E operations are attributed to the through traffic volumes along U.S. Highway 24 and the high amount of eastbound left turning volumes. Potential mitigations may include an additional through lane along U.S. Highway 24.

It is again noted that the intersection of U.S. Highway 24 with Old Meridian Road is expected to maintain right-turn acceleration lanes for each direction. As such, all movements are expected to operate as free-flow and therefore are not expected to experience any delay or queueing.

## 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, 12<sup>th</sup> 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. 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 code 220 (Multifamily Housing (Low-Rise)) was used for estimating trip generation because of its conservative rates and best fit to the proposed land use description.

Due to the conceptual nature of the proposed development, no specific residential land uses and densities have been determined. As such, a maximum density of 30 units per acre, provided by Section 5.4.2 of the El Paso County Land Development Code<sup>7</sup>, was applied.

As actual land uses, densities, or site plans within the 12057 Highway 24 Multifamily Rezone become defined over time, it is expected that traffic generation characteristics considered within this study will need to be updated by more specific traffic analyses or studies to help assess if transportation improvements are needed to mitigate potential traffic impacts.

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

**Table 4 – Trip Generation Rates**

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
220	Multifamily Housing (Low-Rise)	DU	6.21	0.10	0.31	0.41	0.32	0.20	0.52

Key: DU = Dwelling Units.

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.

<sup>7</sup> Land Development Code of El Paso County, Colorado, El Paso County Development, December 2021.

**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
220	Multifamily Housing (Low-Rise)	349 DU	2,167	34	109	143	113	69	181
<i>Total:</i>			2,167	34	109	143	113	69	181

Key: DU = Dwelling Units.

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 2,167 daily vehicle trips with 143 of those occurring during the morning peak hour and 181 during the afternoon peak hour.

### Adjustments to Trip Generation Rates

A development of this type is not likely to attract trips from within area land uses nor pass-by or diverted link trips from the adjacent roadway system, therefore no trip reduction was taken in this analysis.

### Trip Distribution

The overall directional distribution of site-generated traffic was determined based on the location of development site within the County, proposed and existing area land uses, allowed turning movements, and available roadway network, and in reference to historical traffic count data provided by CDOT's Traffic Count Database System (TCDS)<sup>8</sup>.

Overall trip distribution patterns for the development are shown on Figure 5.

### Trip Assignment

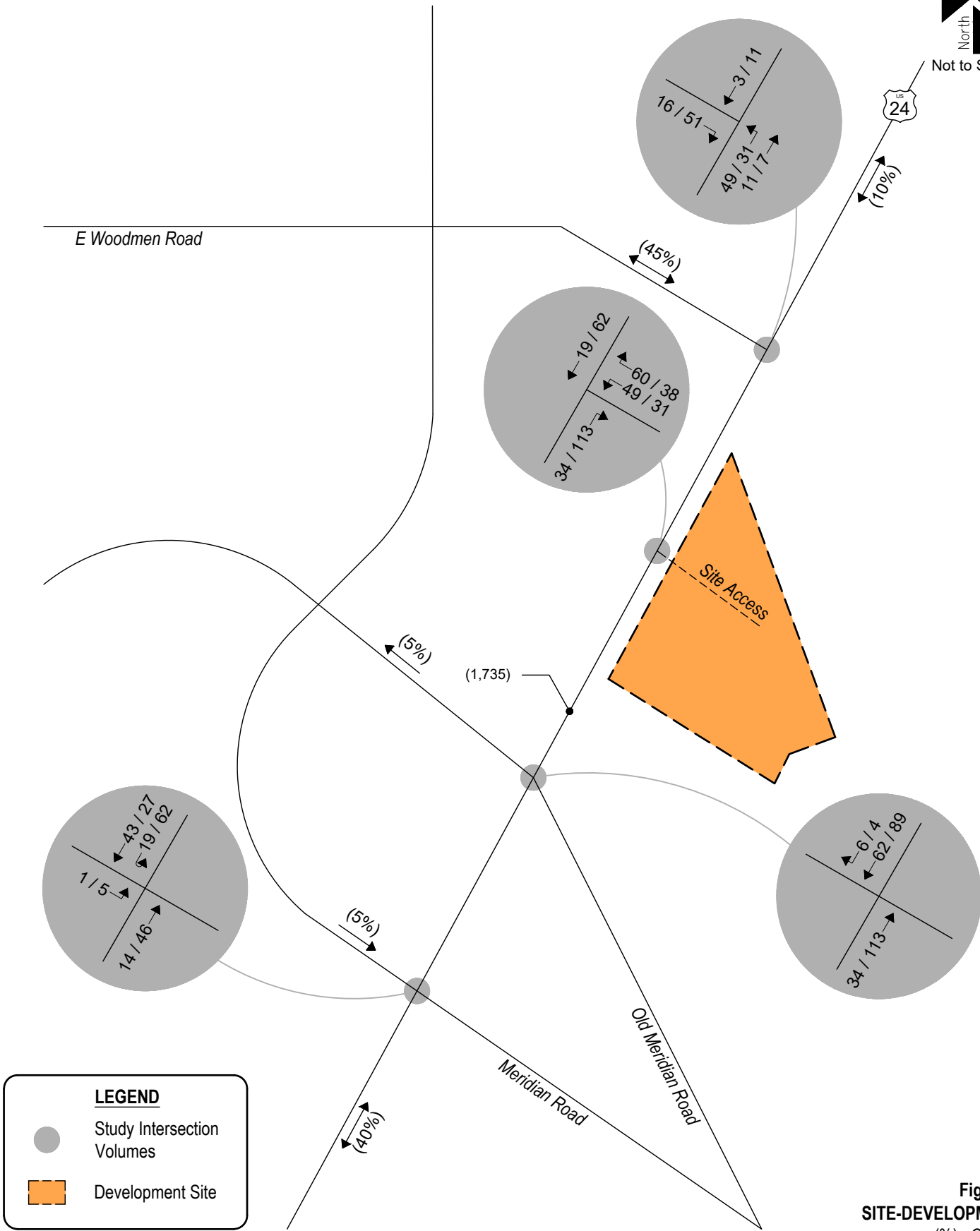
Trip assignment is how generated and distributed vehicle trips are expected to be loaded onto the available roadway network.

Applying trip distribution patterns to site-generated traffic provides the overall site-generated trip assignments shown on Figure 5.

<sup>8</sup> Transportation Data Management System, MS2, 2026.



Not to Scale



**Figure 5**  
**SITE-DEVELOPMENT**  
 (%): Overall  
**SITE-GENERATED TRIPS**  
 AM / PM Peak Hour  
 (ADT): Average Daily Traffic



## V. Future Traffic Conditions With Proposed Development

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 2028 and 2045 with consideration of site-generated traffic. For analysis purposes, it was assumed that development construction would be completed by end of Year 2028.

Pursuant to area roadway improvement discussions provided in Section III, Year 2028 and Year 2045 total traffic conditions assume no additional roadway improvements to accommodate regional transportation demands. Roadway improvements associated with site development are expected to be limited to site access and frontage as required by the governing agency.

### Total Traffic Auxiliary Lane Analysis

Auxiliary lanes for site development access drives were evaluated and are to be based on CDOT's State Highway Access Code (SHAC)<sup>9</sup>.

Considering development build-out, an evaluation of auxiliary lane requirements, pursuant to Section 3.7(4) of CDOT's SHAC, reveals that a right turn deceleration lane at Site Access along U.S. Highway 24 may be required since the development's projected peak hour right turn ingress volume exceeds CDOT's threshold of 10 vph.

Further, Section 3.7(4) of CDOT's SHAC reveals that a westbound to northbound right turn acceleration lane at Site Access along U.S. Highway 24 may be required since the development's projected peak hour right turn egress volume exceeds CDOT's threshold of 10 vph. Conversely, CDOT's SHAC indicates that left turn acceleration lanes may be required if such a design would be a benefit to the safety and operation of the roadway or as determined by Section 3.5 of CDOT's SHAC.

It is noted that the right turn deceleration lane was assumed and modeled within the total traffic scenarios provided in this study while the westbound to northbound right turn acceleration lane and westbound to southbound left turn acceleration lane were not modeled. However, considering the conceptual nature of this development, no turn lanes are being recommended at this time. Instead, as actual land uses, densities, or site plans within the 12057 Highway 24 Multifamily Rezone 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.

Projected Year 2028 total traffic volumes and intersection geometry are shown in Figure 6.

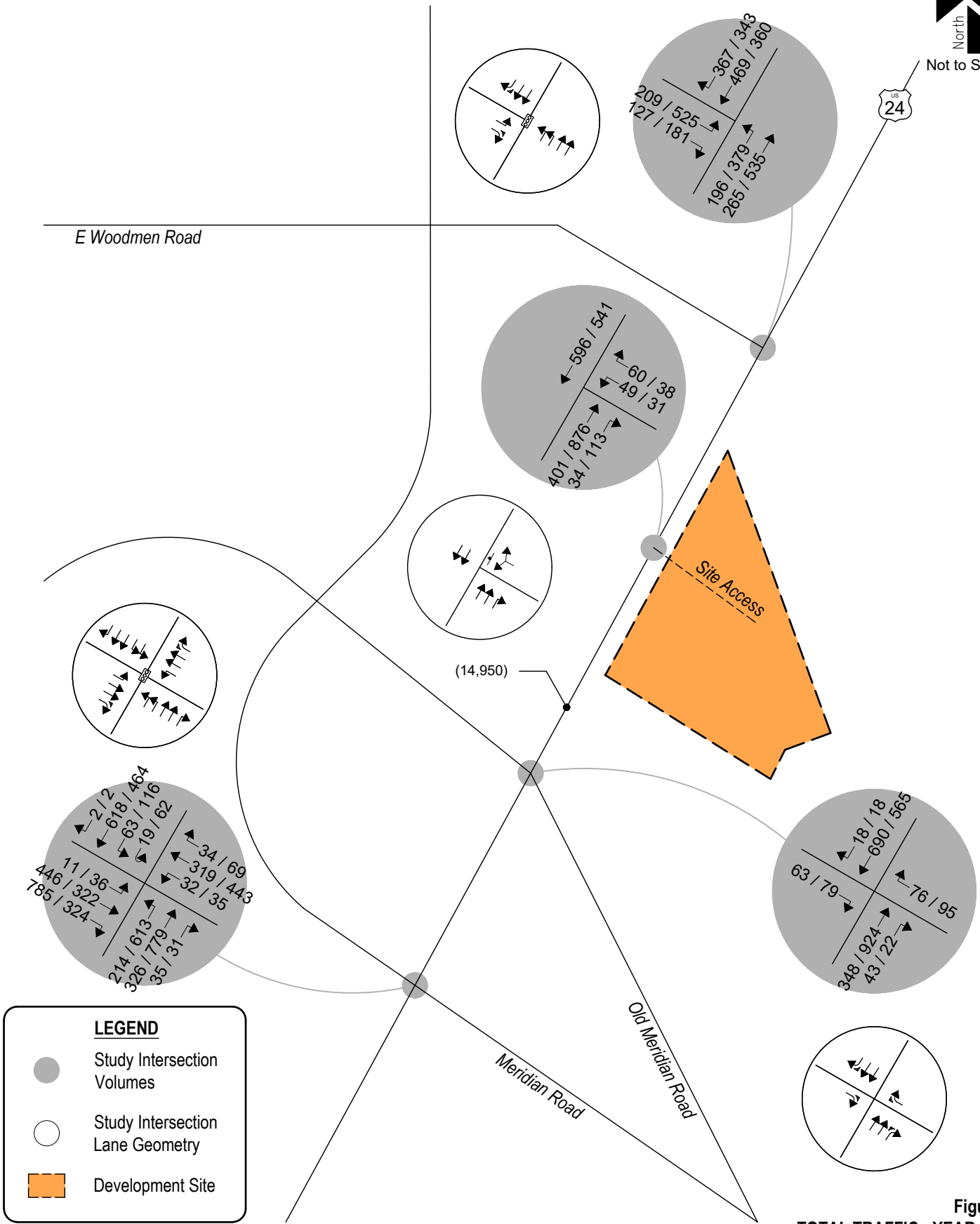
Figure 7 shows projected total traffic volumes and intersection geometry for Year 2045.

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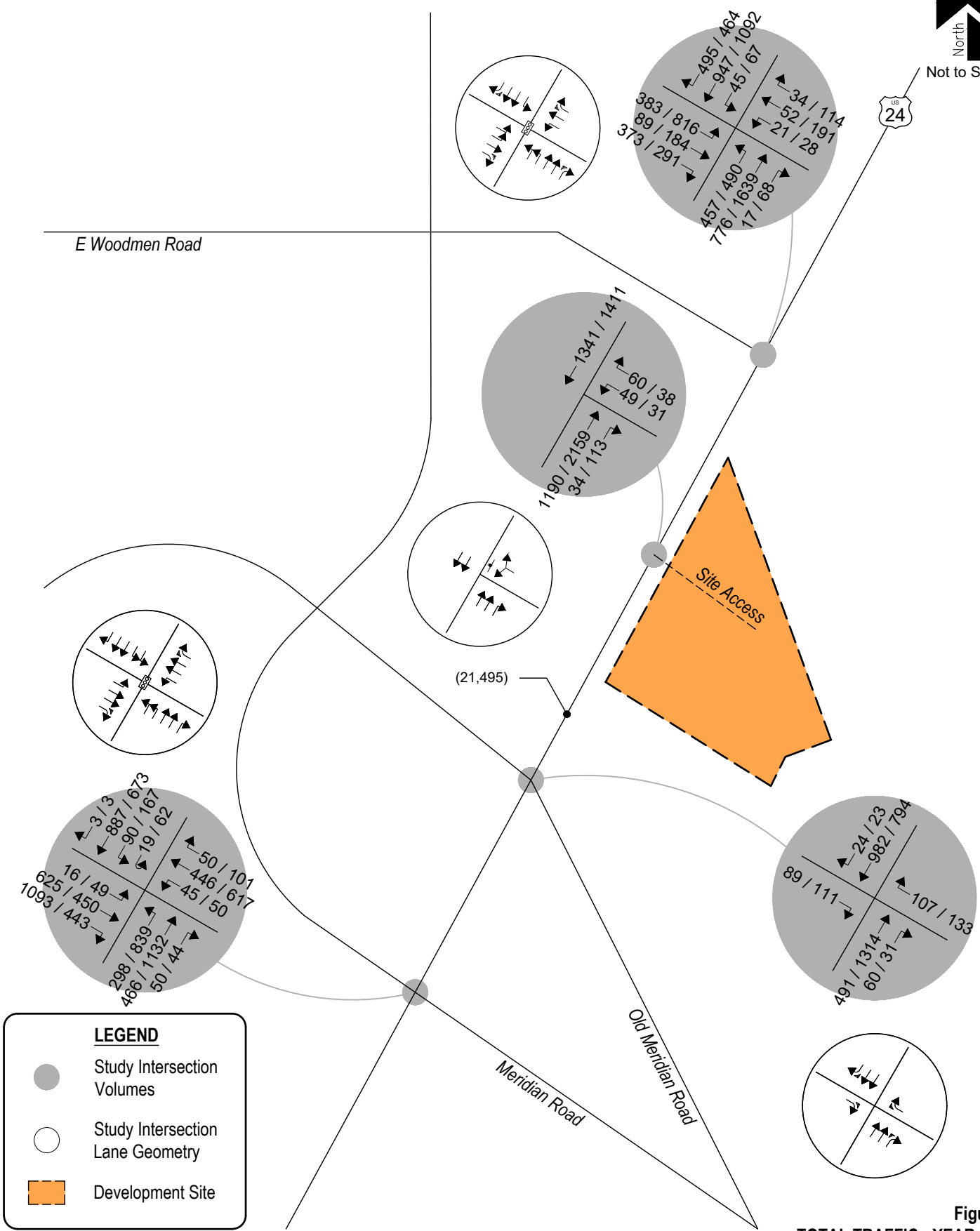
<sup>9</sup> State Highway Access Code, The Transportation Commission of Colorado, March 2002.



Not to Scale



**Figure 6**  
**TOTAL TRAFFIC - YEAR 2027**  
 Volumes & Intersection Geometry  
 AM / PM Peak Traffic Hour  
 (ADT) : Average Daily Traffic



**Figure 7**  
**TOTAL TRAFFIC - YEAR 2045**  
 Volumes & Intersection Geometry  
 AM / PM Peak Traffic Hour  
 (ADT) : Average Daily Traffic

### 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. The analyses and procedures 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.

Total traffic level of service analysis results for Years 2028 and 2045 are summarized in Table 6 and Table 7, respectively.

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

**Table 6 – Intersection Capacity Analysis Summary – Total Traffic – Year 2028**

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
U.S. Highway 24 / Meridian Road (Signalized)	C (27.1)	D (36.0)
U.S. Highway 24 / E Woodmen Road (Signalized)	B (19.7)	C (29.7)
U.S. Highway 24 / Old Meridian Road (Stop-Controlled) Eastbound Right Westbound Right	A A	A A
U.S. Highway 24 / Site Access (Stop-Controlled) Westbound Left and Right Northbound Right	B A	C A

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

**Table 7 – Intersection Capacity Analysis Summary – Total Traffic – Year 2045**

INTERSECTION LANE GROUPS	LEVEL OF SERVICE	
	AM PEAK HOUR	PM PEAK HOUR
U.S. Highway 24 / Meridian Road (Signalized)	C (32.8)	D (46.3)
U.S. Highway 24 / E Woodmen Road (Signalized)	C (31.2)	E (75.7)
U.S. Highway 24 / Old Meridian Road (Stop-Controlled) Eastbound Right Westbound Right	A A	A A
U.S. Highway 24 / Site Access (Stop-Controlled) Westbound Left and Right Northbound Right	F A	F A

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

### **Total Traffic Analysis Results Upon Development Build-Out**

Table 7 illustrates how, by Year 2045 and upon development build-out, the signalized intersection of U.S. Highway 24 and Meridian Road continues to project overall LOS C operation during the morning peak traffic hour and LOS D operation during the afternoon peak traffic hour. Compared to the background traffic analysis, the traffic generated by the proposed development is not expected to significantly change the operations of the study intersection.

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

It is reemphasized that the intersection of U.S. Highway 24 with Old Meridian Road is expected to maintain right-turn acceleration lanes for each direction. As such, all movements are expected to operate as free-flow and therefore are not expected to experience any delay or queueing.

The stop-controlled intersection of U.S. Highway 24 and Site Access is projected to have turning movement operations at LOS F during the morning and afternoon peak traffic hour. Potential mitigations to the extended delay include the addition of a westbound to southbound left turn acceleration lane. However, considering the conceptual nature of this development and that this development will be expected to obtain full-movement access via future connection to the adjacent Falcon Fields development, no mitigation is recommended. Since connection to Falcon Fields is currently not possible, and it is unknown when or if access will be possible, analysis results indicate the worst case scenario for this access.

It is to be noted that it is not uncommon for unsignalized movements to or from an arterial roadway, in urban areas, to operate with noticeable delays during peak traffic hours. It is, however, likely that turn movements will operate better than the results obtained with this HCM Two-Way Stop-Control (TWSC) level of service analysis would indicate, as the HCM analysis may not accurately account for the effect of vehicle platooning and gaps caused by upstream signals. The upstream signal controls along U.S. Highway 24 will tend to create additional gaps in the traffic stream for turning movements at Site Access and will most likely provide mitigation to the LOS F operation projected during the afternoon peak traffic hour.

These intersection operations are similar to background conditions.

## VI. Project Impacts

It is emphasized that 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.

### Queue Length Analysis

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

In general, auxiliary lane lengths are recommended to accommodate CDOT's minimum turn lane lengths or accommodate long-term 95<sup>th</sup> percentile vehicle queues, whichever is greater.

Table 8 summarizes the 95<sup>th</sup> percentile queue results in comparison to the projected storage requirements for turn movements within study area for Year 2045.

**Table 8 – Turn Lane Queues and Storage Requirements – Year 2045**

Intersection	Turn Movement	Existing Turn Lane Length (feet)	Background 2045		Total 2045		Recommended Turn Lane Length (feet)	
			AM Peak Hour (feet)	PM Peak Hour (feet)	AM Peak Hour (feet)	PM Peak Hour (feet)		
<b>Signalized Intersections</b>								
U.S. Highway 24 / Meridian Road	EB	L	210'	26'	64'	28'	69'	210'
		T	-	370'	274'	370'	274'	-
		R	610'	0'	0'	0'	0'	610'
	WB	L	825'	60'	70'	60'	70'	825'
		T	-	257'	386'	257'	386'	-
		R	715'	0'	0'	0'	0'	715'
	NB	L	230'	200'	488'	200'	488'	255' x2
		T	-	185'	539'	192'	574'	-
		R	270'	0'	1'	0'	1'	270'
	SB	L	295'	106'	175'	126'	255'	295'
		T	-	447'	393'	482'	402'	-
		R	190'	0'	0'	0'	0'	190'
U.S. Highway 24 / E Woodmen Road	EB	L	195'	251'	635'	253'	635'	320' x2
		T	-	129'	218'	130'	218'	-
		R	-	0'	0'	0'	0'	-
	WB	L	-	53'	64'	53'	64'	-
		T	-	98'	336'	98'	336'	-
		R	390'	0'	0'	0'	0'	390'
	NB	L	850' x2	265'	373'	293'	398'	850' x2
		T	-	260'	1092'	263'	1105'	-
		R	-	0'	0'	0'	0'	-
	SB	L	-	87'	183'	87'	183'	-
		T	-	517'	696'	527'	721'	-
		R	390'	0'	0'	0'	0'	390'
<b>Stop-Controlled Intersections</b>								
U.S. Highway 24 / Old Meridian Road	EB	R	-	0'	0'	0'	0'	-
		WB	R	-	0'	0'	0'	0'
	NB	T	-	0'	0'	0'	0'	-
		R	-	0'	0'	0'	0'	-
	SB	T	-	0'	0'	0'	0'	-
		R	-	0'	0'	0'	0'	-
U.S. Highway 24 / Site Access	WB	L,R	-	-	-	203'	248'	-
		T	-	-	-	0'	0'	-
	NB	R	-	-	-	0'	0'	600'
		T	-	-	-	0'	0'	-

Note: Turn Lane Length does not include taper length.  
x2 = Dual Turn Lanes.

**Development Impacts**

Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create minimal negative impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative assumptions defined in this analysis, the study intersections are projected to operate at future levels of service comparable to Year 2045 background traffic conditions.

The extended delay projected for the westbound turning movement at the intersection of U.S. Highway 24 and Site Access is not expected to negatively affect traffic operations for the surrounding roadway network as extended delay is expected to occur internal to the development. Additionally, considering the conceptual nature of this development and that full-movement access is expected to be obtained via future connection to the adjacent Falcon Fields development, no improvements are recommended at this time.

### **Recommended Improvements**

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 95<sup>th</sup> percentile queue lengths, and per requirements defined within the County's ECM and CDOT's SHAC.

Considering the conceptual nature of the development areas proposed, no improvements to the public roadway network are recommended at this time. As actual land uses, densities, or site plans within 12057 Highway 24 Multifamily Rezone become defined over time, it is expected that more specific traffic analyses or studies will be needed to help assess if transportation improvement 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 12057 Highway 24 Multifamily Rezone. This proposed residential development consists of 349 multifamily dwelling units and is located to the northeast of U.S. Highway 24 and Meridian Road in El Paso County, Colorado.

The study area examined in this analysis encompassed the U.S. Highway 24 intersections with Meridian Road, Old Meridian Road, and E Woodmen Road and included the proposed site access.

Analysis was conducted for critical AM Peak Hour and PM Peak Hour traffic operations for existing traffic conditions, Year 2028 and Year 2045 background traffic conditions, and Year 2028 and Year 2045 total traffic conditions.

Analysis of existing traffic conditions indicates that all signalized intersections operate under LOS C or better during the morning peak traffic hour and LOS D or better during the afternoon peak traffic hour. The U.S. Highway 24 intersection with Old Meridian Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

Under Year 2028 and 2045 background traffic conditions, operational analysis shows that all signalized intersections are projected to operate with LOS D or better during the morning and afternoon peak traffic hour. Exceptions include the intersection of U.S. Highway 24 and E Woodmen Road which is expected to provide overall operations at LOS E during the afternoon peak traffic hour. The U.S. Highway 24 intersection with Old Meridian Road has turning movement operations at LOS A during the morning and afternoon peak traffic hours.

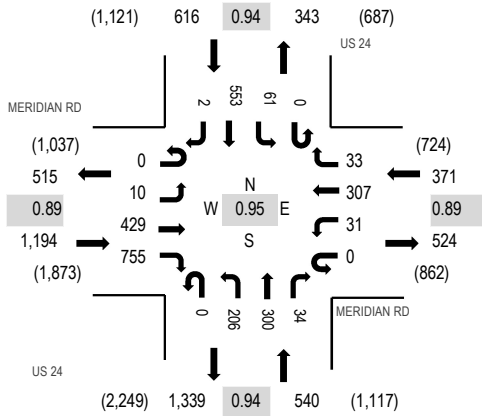
Analysis of future traffic conditions indicates that the addition of site-generated traffic is expected to create minimal negative impact to traffic operations for the existing and surrounding roadway system upon roadway and intersection control improvements assumed within this analysis. With all conservative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

The submitting of new CDOT access permits are anticipated with the development of this site and will be coordinated through CDOT staff.

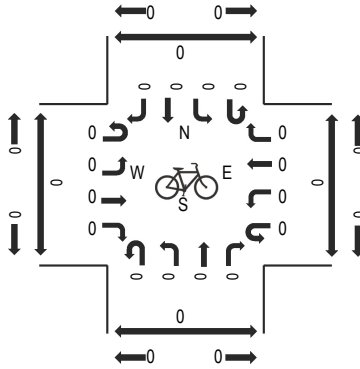
## **APPENDIX A**

### **Traffic Count Data Signal Timing Information**

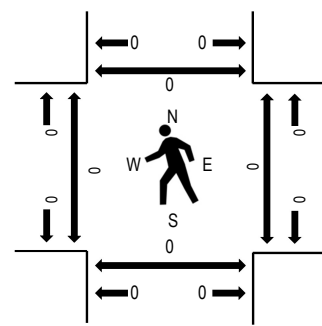
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians

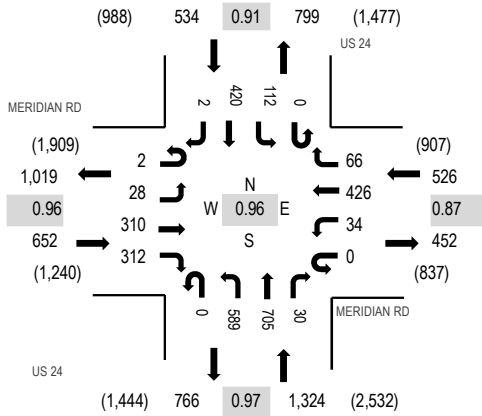


Note: Total study counts contained in parentheses.

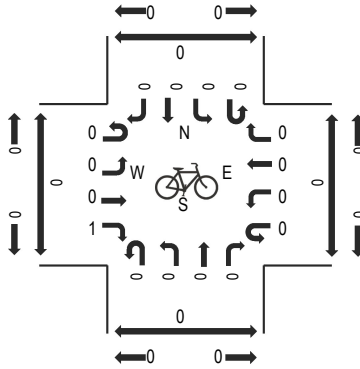
### Traffic Counts - Motorized Vehicles

Interval Start Time	MERIDIAN RD Eastbound				MERIDIAN RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	2	87	163	0	9	73	6	0	44	64	9	0	12	151	1	621	2,721	0	0	0	0
7:15 AM	0	6	116	209	0	6	58	6	0	49	67	6	0	20	142	0	685	2,647	0	0	0	0
7:30 AM	0	1	126	210	0	5	83	11	0	51	76	8	0	14	131	0	716	2,555	0	0	0	0
7:45 AM	0	1	100	173	0	11	93	10	0	62	93	11	0	15	129	1	699	2,400	0	0	0	0
8:00 AM	0	4	58	120	0	7	61	13	0	60	79	14	0	18	112	1	547	2,114	0	0	0	0
8:15 AM	0	1	84	125	0	13	86	11	0	77	58	10	0	12	116	0	593		0	0	0	0
8:30 AM	0	1	38	125	0	6	68	11	0	64	84	14	0	28	120	2	561		0	0	0	0
8:45 AM	0	2	48	73	0	11	56	10	0	45	70	2	0	12	82	2	413		0	0	0	0
Count Total	0	18	657	1,198	0	68	578	78	0	452	591	74	0	131	983	7	4,835		0	0	0	0
Peak Hour	0	10	429	755	0	31	307	33	0	206	300	34	0	61	553	2	2,721		0	0	0	0

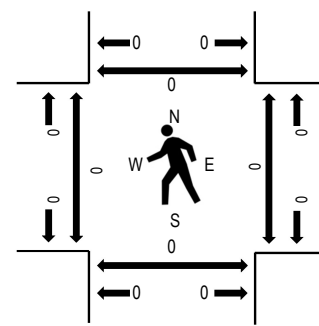
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians

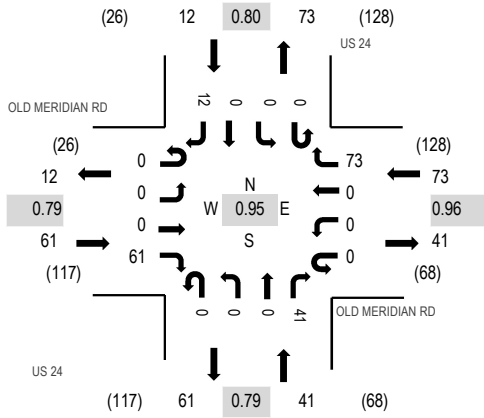


Note: Total study counts contained in parentheses.

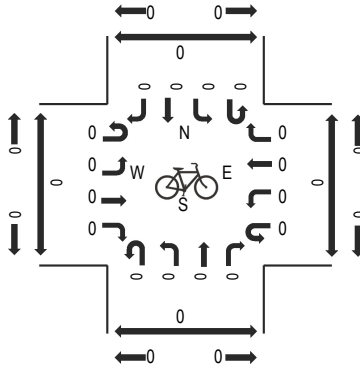
### Traffic Counts - Motorized Vehicles

Interval Start Time	MERIDIAN RD Eastbound				MERIDIAN RD Westbound				US 24 Northbound			US 24 Southbound			Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left			Thru	Right	West	East	South	North
4:00 PM	0	5	59	64	0	6	124	13	0	141	155	6	0	30	94	3	700	3,015	0	0	0	0
4:15 PM	0	6	79	82	0	12	95	17	0	144	182	10	0	35	112	0	774	3,036	0	0	0	0
4:30 PM	0	2	87	77	0	12	131	19	0	141	174	5	0	27	119	0	794	2,949	0	0	0	0
4:45 PM	0	9	73	80	0	6	114	17	0	157	178	6	0	21	86	0	747	2,800	0	0	0	0
5:00 PM	2	11	71	73	0	4	86	13	0	147	171	9	0	29	103	2	721	2,652	0	0	0	0
5:15 PM	0	6	76	88	0	7	81	15	0	150	153	7	0	17	86	1	687		0	0	0	0
5:30 PM	0	8	71	81	0	6	47	4	0	149	152	7	0	25	95	0	645		0	0	0	0
5:45 PM	0	4	68	58	0	7	59	12	0	134	151	3	0	16	86	1	599		0	0	0	0
Count Total	2	51	584	603	0	60	737	110	0	1,163	1,316	53	0	200	781	7	5,667		0	0	0	0
Peak Hour	2	28	310	312	0	34	426	66	0	589	705	30	0	112	420	2	3,036		0	0	0	0

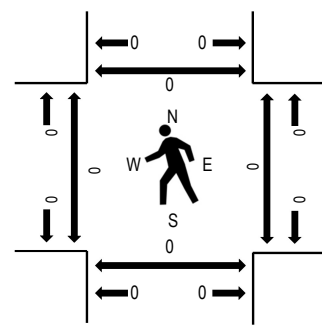
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians

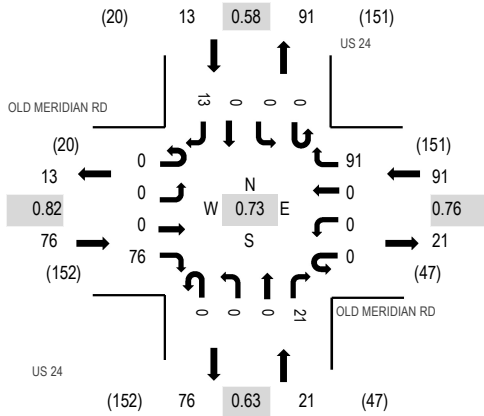


Note: Total study counts contained in parentheses.

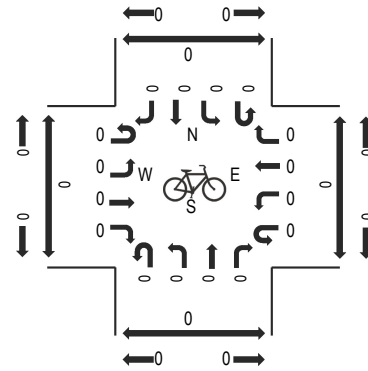
### Traffic Counts - Motorized Vehicles

Interval Start Time	OLD MERIDIAN RD Eastbound				OLD MERIDIAN RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	0	0	18	0	0	0	19	0	0	0	9	0	0	0	1	47	187	0	0	0	0
7:15 AM	0	0	0	13	0	0	0	17	0	0	0	10	0	0	0	4	44	184	0	0	0	0
7:30 AM	0	0	0	19	0	0	0	19	0	0	0	9	0	0	0	2	49	175	0	0	0	0
7:45 AM	0	0	0	11	0	0	0	18	0	0	0	13	0	0	0	5	47	161	0	0	0	0
8:00 AM	0	0	0	20	0	0	0	11	0	0	0	8	0	0	0	5	44	152	0	0	0	1
8:15 AM	0	0	0	12	0	0	0	15	0	0	0	6	0	0	0	2	35		0	0	0	0
8:30 AM	0	0	0	15	0	0	0	11	0	0	0	6	0	0	0	3	35		0	0	0	0
8:45 AM	0	0	0	9	0	0	0	18	0	0	0	7	0	0	0	4	38		0	0	0	0
Count Total	0	0	0	117	0	0	0	128	0	0	0	68	0	0	0	26	339		0	0	0	1
Peak Hour	0	0	0	61	0	0	0	73	0	0	0	41	0	0	0	12	187		0	0	0	0

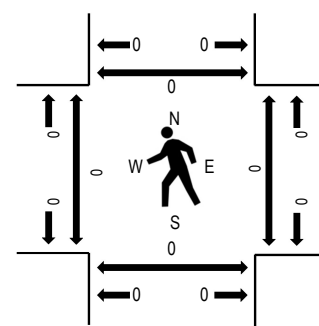
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians

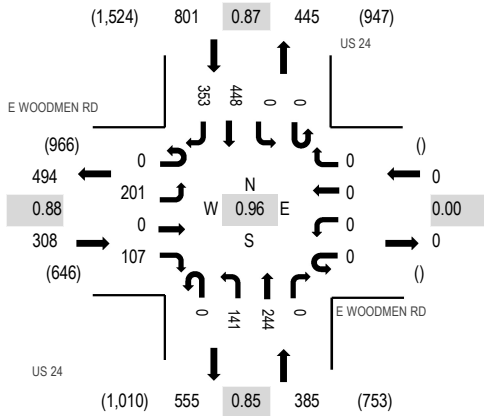


Note: Total study counts contained in parentheses.

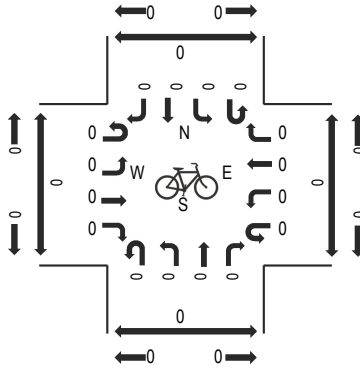
### Traffic Counts - Motorized Vehicles

Interval Start Time	OLD MERIDIAN RD Eastbound				OLD MERIDIAN RD Westbound				US 24 Northbound				US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	16	0	0	0	24	0	0	0	5	0	0	0	4	49	181	0	0	0	0
4:15 PM	0	0	0	28	0	0	0	20	0	0	0	5	0	0	0	6	59	201	0	0	0	0
4:30 PM	0	0	0	15	0	0	0	20	0	0	0	1	0	0	0	2	38	181	0	0	0	0
4:45 PM	0	0	0	11	0	0	0	21	0	0	0	1	0	0	0	2	35	186	0	0	0	0
5:00 PM	0	0	0	22	0	0	0	30	0	0	0	14	0	0	0	3	69	189	0	0	0	0
5:15 PM	0	0	0	18	0	0	0	13	0	0	0	6	0	0	0	2	39		0	0	0	0
5:30 PM	0	0	0	25	0	0	0	11	0	0	0	7	0	0	0	0	43		0	0	0	0
5:45 PM	0	0	0	17	0	0	0	12	0	0	0	8	0	0	0	1	38		0	0	0	0
Count Total	0	0	0	152	0	0	0	151	0	0	0	47	0	0	0	20	370		0	0	0	0
Peak Hour	0	0	0	76	0	0	0	91	0	0	0	21	0	0	0	13	201		0	0	0	0

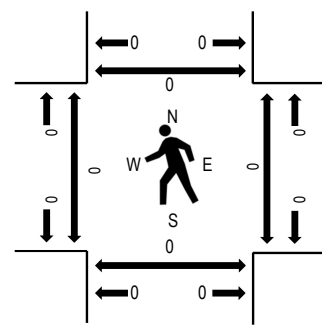
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians

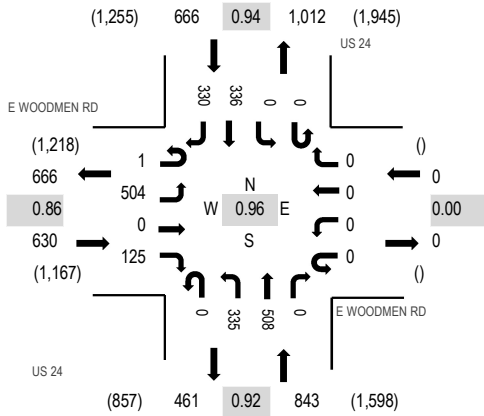


Note: Total study counts contained in parentheses.

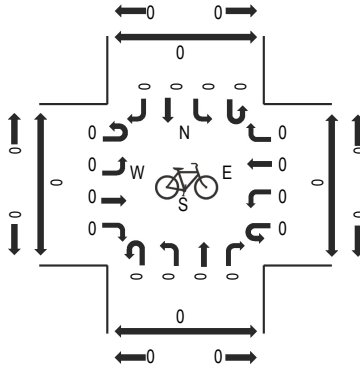
### Traffic Counts - Motorized Vehicles

Interval Start Time	E WOODMEN RD Eastbound				E WOODMEN RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	41	0	31	0	0	0	0	0	25	61	0	0	0	144	85	387	1,494	0	0	0	0
7:15 AM	0	56	0	25	0	0	0	0	0	35	56	0	0	0	104	81	357	1,486	0	0	0	0
7:30 AM	0	52	0	18	0	0	0	0	0	42	50	0	0	0	101	99	362	1,484	0	0	0	0
7:45 AM	0	52	0	33	0	0	0	0	0	39	77	0	0	0	99	88	388	1,479	0	0	0	0
8:00 AM	0	69	0	18	0	0	0	0	0	27	70	0	0	0	94	101	379	1,429	0	0	0	0
8:15 AM	0	60	0	23	0	0	0	0	0	26	54	0	0	0	103	89	355		0	0	0	0
8:30 AM	0	69	0	32	0	0	0	0	0	29	61	0	0	0	91	75	357		0	0	0	0
8:45 AM	0	50	0	17	0	0	0	0	0	32	69	0	0	0	77	93	338		0	0	0	0
Count Total	0	449	0	197	0	0	0	0	0	255	498	0	0	0	813	711	2,923		0	0	0	0
Peak Hour	0	201	0	107	0	0	0	0	0	141	244	0	0	0	448	353	1,494		0	0	0	0

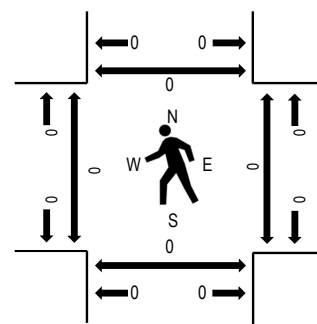
### Peak Hour - Motorized Vehicles



### Peak Hour - Bicycles



### Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

### Traffic Counts - Motorized Vehicles

Interval Start Time	E WOODMEN RD Eastbound				E WOODMEN RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	111	0	38	0	0	0	0	0	88	134	0	0	0	78	71	520	2,110	0	0	0	0
4:15 PM	0	150	0	34	0	0	0	0	0	75	119	0	0	0	100	77	555	2,139	0	0	0	0
4:30 PM	0	97	0	39	0	0	0	0	0	105	123	0	0	0	77	78	519	2,052	0	0	0	0
4:45 PM	0	125	0	22	0	0	0	0	0	69	128	0	0	0	93	79	516	1,996	0	0	0	0
5:00 PM	1	132	0	30	0	0	0	0	0	86	138	0	0	0	66	96	549	1,910	0	0	0	0
5:15 PM	1	102	0	21	0	0	0	0	0	70	122	0	0	0	80	72	468		0	0	0	0
5:30 PM	0	149	0	15	0	0	0	0	0	43	112	0	0	0	67	77	463		0	0	0	0
5:45 PM	0	80	0	20	0	0	0	0	0	63	123	0	0	0	77	67	430		0	0	0	0
Count Total	2	946	0	219	0	0	0	0	0	599	999	0	0	0	638	617	4,020		0	0	0	0
Peak Hour	1	504	0	125	0	0	0	0	0	335	508	0	0	0	336	330	2,139		0	0	0	0



# All Traffic Data Services

4 - US 24 NORTH OF OLD MERIDIAN RD

Time	NB	SB	Total
12/16/2025	6	4	10
12/16/2025 12:15:00 AM	8	5	13
12/16/2025 12:30:00 AM	11	7	18
12/16/2025 12:45:00 AM	4	3	7
12/16/2025 1:00:00 AM	5	2	7
12/16/2025 1:15:00 AM	4	1	5
12/16/2025 1:30:00 AM	4	1	5
12/16/2025 1:45:00 AM	4	5	9
12/16/2025 2:00:00 AM	1	4	5
12/16/2025 2:15:00 AM	4	3	7
12/16/2025 2:30:00 AM	4	2	6
12/16/2025 2:45:00 AM	5	3	8
12/16/2025 3:00:00 AM	2	2	4
12/16/2025 3:15:00 AM	5	6	11
12/16/2025 3:30:00 AM	5	16	21
12/16/2025 3:45:00 AM	9	6	15
12/16/2025 4:00:00 AM	7	13	20
12/16/2025 4:15:00 AM	7	14	21
12/16/2025 4:30:00 AM	18	26	44
12/16/2025 4:45:00 AM	13	27	40
12/16/2025 5:00:00 AM	11	39	50
12/16/2025 5:15:00 AM	15	57	72
12/16/2025 5:30:00 AM	24	94	118
12/16/2025 5:45:00 AM	31	88	119
12/16/2025 6:00:00 AM	37	130	167
12/16/2025 6:15:00 AM	74	151	225
12/16/2025 6:30:00 AM	111	150	261
12/16/2025 6:45:00 AM	87	177	264
12/16/2025 7:00:00 AM	86	156	242
12/16/2025 7:15:00 AM	87	146	233
12/16/2025 7:30:00 AM	101	122	223
12/16/2025 7:45:00 AM	116	129	245
12/16/2025 8:00:00 AM	90	117	207
12/16/2025 8:15:00 AM	81	126	207
12/16/2025 8:30:00 AM	99	135	234
12/16/2025 8:45:00 AM	93	90	183
12/16/2025 9:00:00 AM	95	102	197
12/16/2025 9:15:00 AM	70	79	149
12/16/2025 9:30:00 AM	73	89	162
12/16/2025 9:45:00 AM	100	72	172
12/16/2025 10:00:00 AM	77	76	153
12/16/2025 10:15:00 AM	70	91	161
12/16/2025 10:30:00 AM	87	86	173
12/16/2025 10:45:00 AM	78	72	150
12/16/2025 11:00:00 AM	72	80	152
12/16/2025 11:15:00 AM	72	76	148
12/16/2025 11:30:00 AM	88	84	172
12/16/2025 11:45:00 AM	102	72	174
<b>Total</b>	<b>2,253</b>	<b>3,036</b>	<b>5,289</b>
<b>Percentage</b>	<b>42.6%</b>	<b>57.4%</b>	
<b>Peak Hour</b>	<b>7:15 AM</b>	<b>6:15 AM</b>	<b>6:30 AM</b>
<b>Volume</b>	<b>394</b>	<b>634</b>	<b>1,000</b>
<b>PHF</b>	<b>0.849</b>	<b>0.895</b>	<b>0.947</b>



# All Traffic Data Services

## 4 - US 24 NORTH OF OLD MERIDIAN RD

Time	NB	SB	Total
12/16/2025 12:00:00 PM	92	80	172
12/16/2025 12:15:00 PM	102	77	179
12/16/2025 12:30:00 PM	60	50	110
12/16/2025 12:45:00 PM	81	91	172
12/16/2025 1:00:00 PM	85	68	153
12/16/2025 1:15:00 PM	111	65	176
12/16/2025 1:30:00 PM	90	72	162
12/16/2025 1:45:00 PM	88	71	159
12/16/2025 2:00:00 PM	110	97	207
12/16/2025 2:15:00 PM	145	81	226
12/16/2025 2:30:00 PM	113	96	209
12/16/2025 2:45:00 PM	104	94	198
12/16/2025 3:00:00 PM	172	97	269
12/16/2025 3:15:00 PM	183	109	292
12/16/2025 3:30:00 PM	186	100	286
12/16/2025 3:45:00 PM	209	129	338
12/16/2025 4:00:00 PM	193	111	304
12/16/2025 4:15:00 PM	215	126	341
12/16/2025 4:30:00 PM	216	127	343
12/16/2025 4:45:00 PM	206	113	319
12/16/2025 5:00:00 PM	233	103	336
12/16/2025 5:15:00 PM	180	93	273
12/16/2025 5:30:00 PM	173	92	265
12/16/2025 5:45:00 PM	173	91	264
12/16/2025 6:00:00 PM	147	75	222
12/16/2025 6:15:00 PM	95	54	149
12/16/2025 6:30:00 PM	87	62	149
12/16/2025 6:45:00 PM	62	38	100
12/16/2025 7:00:00 PM	80	32	112
12/16/2025 7:15:00 PM	58	30	88
12/16/2025 7:30:00 PM	58	20	78
12/16/2025 7:45:00 PM	43	37	80
12/16/2025 8:00:00 PM	37	25	62
12/16/2025 8:15:00 PM	64	24	88
12/16/2025 8:30:00 PM	53	16	69
12/16/2025 8:45:00 PM	34	27	61
12/16/2025 9:00:00 PM	52	14	66
12/16/2025 9:15:00 PM	40	20	60
12/16/2025 9:30:00 PM	34	12	46
12/16/2025 9:45:00 PM	20	20	40
12/16/2025 10:00:00 PM	29	13	42
12/16/2025 10:15:00 PM	23	8	31
12/16/2025 10:30:00 PM	14	17	31
12/16/2025 10:45:00 PM	17	4	21
12/16/2025 11:00:00 PM	16	10	26
12/16/2025 11:15:00 PM	11	10	21
12/16/2025 11:30:00 PM	4	8	12
12/16/2025 11:45:00 PM	4	5	9
<b>Total</b>	<b>4,602</b>	<b>2,814</b>	<b>7,416</b>
<b>Percentage</b>	<b>62.1%</b>	<b>37.9%</b>	
<b>Peak Hour</b>	<b>4:15 PM</b>	<b>3:45 PM</b>	<b>4:15 PM</b>
<b>Volume</b>	<b>870</b>	<b>493</b>	<b>1,339</b>
<b>PHF</b>	<b>0.933</b>	<b>0.955</b>	<b>0.976</b>
<b>Grand Total</b>	<b>6,855</b>	<b>5,850</b>	<b>12,705</b>
<b>Percentage</b>	<b>54.0%</b>	<b>46.0%</b>	



Ped Service Limit	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
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

**Phase Options**

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Enable	X	X	X	X	X	X	X	X												
Auto Flash Ent.		X				X														
Auto Flash Exit		X				X														
Non Actuated I																				
Non Actuated II																				
Non Lock Mem	X	X	X	X	X	X	X	X												
Min Veh Recall																				
Max Veh Recall																				
Ped Recall																				
Soft Veh Recall																				
Dual Entry				X				X												
Sim Gap Dis																				
Guaranteed Pass																				
Act Rest Walk																				
Cond Service																				
Add Initial																				
Ped Clr During Yel																				
Ped Clr During Red																				
Cond Reservice																				
Yel Min Override																				
No Startup Call																				
Adv. Warn Flasher																				
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		Sequence 2		Sequence 3		Sequence 4	
Ph.	No Serve Phases	Ph.	No Serve Phases	Ph.	No Serve Phases	Ph.	No Serve Phases
1		1		1		1	
2		2		2		2	

3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	

<b>Sequence 1</b>		<b>Sequence 2</b>		<b>Sequence 3</b>		<b>Sequence 4</b>	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

**Phase Configuration**

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

**Sequence Configuration**

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

15	
16	

15	
16	

15	
16	

15	
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	1	1	1	1	1	1	1	1	1	2
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	Call	Call	Add Call	Sw			Queue	Ext	No	Max	Erratic	Failed	Failed	Fail	Description
	Phs	Ped	Ovl			Phases	Phs									
33	1	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
34	2	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
35	3	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
36	4	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
37	5	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
38	6	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
39	7	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	0	
40	8	0	0		0	0.0	0.0	0	0.0	0	0	0	20	Max	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	0	0	None	0
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	0	0	None	0

**Vehicle Detection Options**

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

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

Detector	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	Max	Car	Det	Trail	Trap
				Log	Log				
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	1	0		0	0	0	0	0
34	2	0		0	0	0	0	0
35	3	0		0	0	0	0	0
36	4	0		0	0	0	0	0
37	5	0		0	0	0	0	0
38	6	0		0	0	0	0	0
39	7	0		0	0	0	0	0
40	8	0		0	0	0	0	0

**Pri/Pre Detectors**

Det	Description	Low Call	High Call	Low	high	Arrival	Pri	Min	Pri	No	Max	Erratic
				Num	Num		Time		Delay			
1		None	None	0	0	0	0	0	0	0	0	0
2		None	None	0	0	0	0	0	0	0	0	0
3		None	None	0	0	0	0	0	0	0	0	0
4		None	None	0	0	0	0	0	0	0	0	0
5		None	None	0	0	0	0	0	0	0	0	0
6		None	None	0	0	0	0	0	0	0	0	0
7		None	None	0	0	0	0	0	0	0	0	0
8		None	None	0	0	0	0	0	0	0	0	0

**Overlaps**

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





8	30	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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									Min	Max	F. Off
1	12	0	0				Fix	None	0	0	Float
2	53	0	0	X	X		Fix	Max Rcl	0	0	Float
3	15	0	0				Fix	None	0	0	Float
4	20	0	0				Fix	None	0	0	Float
5	15	0	0				Fix	None	0	0	Float
6	50	0	0	X	X		Fix	Max Rcl	0	0	Float
7	15	0	0				Fix	None	0	0	Float
8	20	0	0				Fix	None	0	0	Float
9	0	0	0				Fix	None	0	0	Float
10	0	0	0				Fix	None	0	0	Float
11	0	0	0				Fix	None	0	0	Float
12	0	0	0				Fix	None	0	0	Float
13	0	0	0				Fix	None	0	0	Float
14	0	0	0				Fix	None	0	0	Float
15	0	0	0				Fix	None	0	0	Float
16	0	0	0				Fix	None	0	0	Float

Split 3

				Coord	Ref	Cover	Force Off				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									Min	Max	F. Off
1	15	0	0				Fix	None	0	0	Float
2	88	0	0	X	X		Fix	Max Rcl	0	0	Float
3	12	0	0				Fix	None	0	0	Float
4	25	0	0				Fix	None	0	0	Float
5	42	0	0				Fix	None	0	0	Float
6	61	0	0	X	X		Fix	Max Rcl	0	0	Float
7	12	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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									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				
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Pri	Pri	Pri
									Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	0	0	0				Fix	None	0	0	Float





J	A	S	O	N	D

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

Day Plan  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

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

Day Plan

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

Day Plan

Event	Hour	Min.	Act
1	19	0	4
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

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

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

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

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

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

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

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

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

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

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

Day Plan

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

Day Plan

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

Day Plan

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	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

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	0	1
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	0	1
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 Override Flash								
NotOverrideNextPre								
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
-----	---	---	---	---	---	---	---	---







Ped Service Limit	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
Pre Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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																				
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		Sequence 2		Sequence 3		Sequence 4	
Ph.	No Serve Phases	Ph.	No Serve Phases	Ph.	No Serve Phases	Ph.	No Serve Phases
1		1		1		1	
2		2		2		2	

3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	

Sequence 1		Sequence 2		Sequence 3		Sequence 4	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	

**Phase Configuration**

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

**Sequence Configuration**

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

15	
16	

15	
16	

15	
16	

15	
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	1	1	1	1	1	1	1	1	1	2
Min					X														
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	Call	Call	Add Call	Sw			Queue	Ext	No	Max	Erratic	Failed	Failed	Fail	Description
	Phs	Ped	Ovl			Phases	Phs									
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	0	0	None	0
72	0	0	0		0	0.0	0.0	0	0.0	0	0	0	0	0	0	None	0

**Vehicle Detection Options**

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

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

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

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

Data Collection Period	0
Number of Periods	1





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	Maximum Mode	Per Pattern	Max Cyc Limit %	15
Coordination Mode	Pattern	Force Mode	Per Pattern	Min Cyc Limit %	15
Correction Mode	Shortway (Auto)	Transition Cover Ped	Pattern	Max Dwell	0

### Patterns

Pattern	Cycle	Offset					Ref	Coord	Force	Max	Trans	Min	Phs	Det	Ped	Ovlp	Pri	Description
		1	2	3	Split	Seq												
1	140	95	0	0	1	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	2	1	
2	100	83	0	0	2	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	2	1	
3	140	6	0	0	3	1	Yel	Auto	Fixed	Inh	Phase	Phs Only	1	1	1	2	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	Mode	Mode	Pri	Pri	Pri
PH.	Time	Min	Max									
1	0	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	40	0	0				Fix	None	0	0	Float	
5	20	0	0				Fix	None	0	0	Float	
6	80	0	0	X	X		Fix	Max Rcl	0	0	Float	
7	0	0	0				Fix	None	0	0	Float	

8	40	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

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	60	0	0	X	X		Fix	Max Rcl	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	40	0	0				Fix	None	0	0	Float
5	20	0	0				Fix	None	0	0	Float
6	40	0	0	X	X		Fix	Max Rcl	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	40	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

Split 3				Coord	Ref	Cover	Force Off		Pri	Pri	Pri
PH.	Time	Min	Max	PH	PH	Ped	Mode	Mode	Min	Max	F. Off
1	0	0	0				Fix	None	0	0	Float
2	75	0	0	X	X		Fix	Max Rcl	0	0	Float
3	0	0	0				Fix	None	0	0	Float
4	65	0	0				Fix	None	0	0	Float
5	25	0	0				Fix	None	0	0	Float
6	50	0	0	X	X		Fix	Max Rcl	0	0	Float
7	0	0	0				Fix	None	0	0	Float
8	65	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

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

PH.	Time	Min	Max	Coord	Ref	Cover	Force Off		Pri	Pri	Pri
				PH	PH	Ped	Mode	Mode			
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

PH.	Time	Min	Max	Coord	Ref	Cover	Force Off		Pri	Pri	Pri
				PH	PH	Ped	Mode	Mode			
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

PH.	Time	Min	Max	Coord	Ref	Cover	Force Off		Pri	Pri	Pri
				PH	PH	Ped	Mode	Mode			
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

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





J	A	S	O	N	D

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

Day Plan  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

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

Day Plan

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

Day Plan

Event	Hour	Min.	Act
1	19	0	4
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

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

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

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

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

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

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

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

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

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

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

Day Plan

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

Day Plan

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

Day Plan

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	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

7	0	0	
8	0	0	
9	0	0	
10	0	0	

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	0	1
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	0	1
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 Override Flash								
NotOverrideNextPre								
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
-----	---	---	---	---	---	---	---	---





## 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	Pgrm	Description
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		32	

## **APPENDIX B**

### **Level of Service Definitions**

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

### **Motorized Vehicle Level of Service (LOS) for Signalized Intersections**

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

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

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

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

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

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

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

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

Note: <sup>a</sup> 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, 7<sup>th</sup> Edition, Transportation Research Board, 2022: Chapter 20 – Two-Way Stop-Controlled Intersections, Chapter 21 – All-Way Stop-Controlled Intersections, and Chapter 22 - Roundabouts.

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

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

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio <sup>a</sup>	
	v/c ≤ 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.

<sup>a</sup> For approaches and intersectionwide assessment, LOS is defined solely by control delay.

## **APPENDIX C**

























### **Capacity Worksheets**

Timings

1: U.S. Highway 24 & Meridian Road

Existing Traffic Conditions

AM Peak Traffic Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	429	755	31	307	33	206	300	34	61	553	2
Future Volume (vph)	10	429	755	31	307	33	206	300	34	61	553	2
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.473			0.232			0.271			0.559		
Satd. Flow (perm)	881	3539	1583	432	3539	1583	505	1863	1583	1041	1863	1583
Satd. Flow (RTOR)			529			160			105			105
Lane Group Flow (vph)	11	466	821	34	334	36	224	326	37	66	601	2
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)	6.0	6.0		6.0	6.0		6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	11.0	12.5		11.0	12.5		11.0	27.0	27.0	11.0	27.0	27.0
Total Split (s)	20.0	30.0		20.0	30.0		20.0	75.0	75.0	15.0	70.0	70.0
Total Split (%)	14.3%	21.4%		14.3%	21.4%		14.3%	53.6%	53.6%	10.7%	50.0%	50.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	6.5		5.0	6.5		5.0	7.0	7.0	5.0	7.0	7.0
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)	29.1	23.6	140.0	31.9	26.9	140.0	96.5	84.6	84.6	87.5	78.1	78.1
Actuated g/C Ratio	0.21	0.17	1.00	0.23	0.19	1.00	0.69	0.60	0.60	0.63	0.56	0.56
v/c Ratio	0.05	0.78	0.52	0.20	0.49	0.02	0.49	0.29	0.04	0.10	0.58	0.00
Control Delay (s/veh)	35.6	65.2	1.2	39.6	52.4	0.0	13.0	16.9	0.1	5.6	18.3	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)	35.6	65.2	1.2	39.6	52.4	0.0	13.0	16.9	0.1	5.6	18.3	0.0
LOS	D	E	A	D	D	A	B	B	A	A	B	A
Approach Delay (s/veh)		24.5			46.7			14.4			17.0	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)	8	220	0	24	134	0	75	156	0	8	382	0
Queue Length 95th (ft)	22	271	0	49	190	0	132	257	0	18	596	m0
Internal Link Dist (ft)		767			477			489			1049	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	303	633	1583	245	716	1583	485	1126	998	722	1039	929
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	0.74	0.52	0.14	0.47	0.02	0.46	0.29	0.04	0.09	0.58	0.00

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Timings

1: U.S. Highway 24 & Meridian Road

Existing Traffic Conditions

AM Peak Traffic Hour

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 23.8

Intersection LOS: C

Intersection Capacity Utilization 77.0%

ICU Level of Service D

Analysis Period (min) 15














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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
 2: U.S. Highway 24 & E Woodmen Road

Existing Traffic Conditions  
 AM Peak Traffic Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			 			
Traffic Volume (vph)	201	107	141	244	448	353
Future Volume (vph)	201	107	141	244	448	353
Satd. Flow (prot)	1770	1583	3433	1863	1863	1583
Flt Permitted	0.950		0.410			
Satd. Flow (perm)	1770	1583	1482	1863	1863	1583
Satd. Flow (RTOR)		116				337
Lane Group Flow (vph)	218	116	153	265	487	384
Turn Type	Prot	Free	pm+pt	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	40.0		20.0	100.0	80.0	
Total Split (%)	28.6%		14.3%	71.4%	57.1%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	22.5	140.0	107.5	105.5	93.4	140.0
Actuated g/C Ratio	0.16	1.00	0.77	0.75	0.67	1.00
v/c Ratio	0.77	0.07	0.12	0.19	0.39	0.24
Control Delay (s/veh)	73.2	0.1	8.2	10.5	12.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.2	0.1	8.2	10.5	12.6	0.4
LOS	E	A	A	B	B	A
Approach Delay (s/veh)	47.8			9.7	7.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	195	0	37	142	189	0
Queue Length 95th (ft)	273	0	64	228	312	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	442	1583	1346	1403	1242	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	0.49	0.07	0.11	0.19	0.39	0.24

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 95 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated

Timings  
2: U.S. Highway 24 & E Woodmen Road

Existing Traffic Conditions  
AM Peak Traffic Hour

Maximum v/c Ratio: 0.77

Intersection Signal Delay (s/veh): 16.2

Intersection LOS: B

Intersection Capacity Utilization 53.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings

1: U.S. Highway 24 & Meridian Road

Existing Traffic Conditions

PM Peak Traffic Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	310	312	34	426	66	589	705	30	112	420	2
Future Volume (vph)	30	310	312	34	426	66	589	705	30	112	420	2
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.198			0.308			0.300			0.313		
Satd. Flow (perm)	369	3539	1583	574	3539	1583	559	1863	1583	583	1863	1583
Satd. Flow (RTOR)			339			187			94			132
Lane Group Flow (vph)	33	337	339	37	463	72	640	766	33	122	457	2
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)	6.0	6.0		6.0	6.0		5.0	25.0	25.0	5.0	25.0	25.0
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	32.0	32.0	10.0	32.0	32.0
Total Split (s)	12.0	25.0		12.0	25.0		42.0	88.0	88.0	15.0	61.0	61.0
Total Split (%)	8.6%	17.9%		8.6%	17.9%		30.0%	62.9%	62.9%	10.7%	43.6%	43.6%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	5.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
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)	24.7	19.2	140.0	25.8	21.6	140.0	101.2	85.8	85.8	71.4	61.1	61.1
Actuated g/C Ratio	0.18	0.14	1.00	0.18	0.15	1.00	0.72	0.61	0.61	0.51	0.44	0.44
v/c Ratio	0.25	0.69	0.21	0.23	0.85	0.05	0.93	0.67	0.03	0.33	0.56	0.00
Control Delay (s/veh)	47.8	65.8	0.3	46.6	72.9	0.1	36.3	22.6	0.1	14.5	36.4	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)	47.8	65.8	0.3	46.6	72.9	0.1	36.3	22.6	0.1	14.5	36.4	0.0
LOS	D	E	A	D	E	A	D	C	A	B	D	A
Approach Delay (s/veh)		33.6			62.1			28.2			31.7	
Approach LOS		C			E			C			C	
Queue Length 50th (ft)	24	157	0	27	225	0	309	474	0	32	193	0
Queue Length 95th (ft)	55	213	0	60	#328	0	#549	647	0	107	444	m0
Internal Link Dist (ft)		767			477			489			1049	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	135	505	1583	165	547	1583	724	1142	1006	389	812	764
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	0.24	0.67	0.21	0.22	0.85	0.05	0.88	0.67	0.03	0.31	0.56	0.00

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Timings

1: U.S. Highway 24 & Meridian Road

Existing Traffic Conditions

PM Peak Traffic Hour

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 35.8

Intersection LOS: D

Intersection Capacity Utilization 89.8%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.














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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
2: U.S. Highway 24 & E Woodmen Road

Existing Traffic Conditions  
PM Peak Traffic Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations			 			
Traffic Volume (vph)	505	125	335	508	336	330
Future Volume (vph)	505	125	335	508	336	330
Satd. Flow (prot)	1770	1583	3433	1863	1863	1583
Flt Permitted	0.950		0.392			
Satd. Flow (perm)	1770	1583	1417	1863	1863	1583
Satd. Flow (RTOR)		70				359
Lane Group Flow (vph)	549	136	364	552	365	359
Turn Type	Prot	Free	pm+pt	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free	2			Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	65.0		25.0	75.0	50.0	
Total Split (%)	46.4%		17.9%	53.6%	35.7%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	49.8	140.0	80.2	78.2	60.4	140.0
Actuated g/C Ratio	0.36	1.00	0.57	0.56	0.43	1.00
v/c Ratio	0.87	0.09	0.37	0.53	0.45	0.23
Control Delay (s/veh)	56.9	0.1	21.5	28.0	33.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.9	0.1	21.5	28.0	33.0	0.3
LOS	E	A	C	C	C	A
Approach Delay (s/veh)	45.6			25.4	16.8	
Approach LOS	D			C	B	
Queue Length 50th (ft)	469	0	90	302	237	0
Queue Length 95th (ft)	563	0	146	444	392	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	758	1583	1099	1040	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	0.72	0.09	0.33	0.53	0.45	0.23
<b>Intersection Summary</b>						
Cycle Length: 140						
Actuated Cycle Length: 140						
Offset: 6 (4%), Referenced to phase 2:NBTL and 6:SBT, Start of Green						
Natural Cycle: 70						
Control Type: Actuated-Coordinated						

Timings  
2: U.S. Highway 24 & E Woodmen Road

Existing Traffic Conditions  
PM Peak Traffic Hour

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 28.7

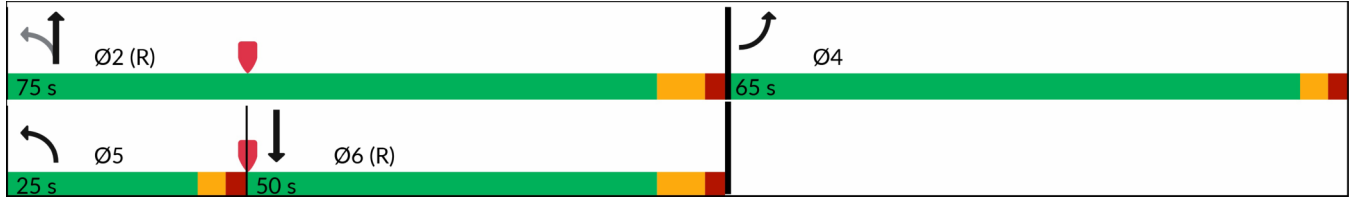
Intersection LOS: C

Intersection Capacity Utilization 72.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings  
1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
AM Peak Traffic Hour - Year 2028

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	446	785	32	319	34	214	312	35	63	575	2
Future Volume (vph)	10	446	785	32	319	34	214	312	35	63	575	2
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.487			0.229			0.950			0.548		
Satd. Flow (perm)	907	3539	1583	427	3539	1583	3433	3539	1583	1021	3539	1583
Satd. Flow (RTOR)			602			199			105			144
Lane Group Flow (vph)	11	485	853	35	347	37	233	339	38	68	625	2
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free			2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	11.0	12.5		11.0	12.5		11.0	27.0	27.0	11.0	27.0	27.0
Total Split (s)	13.0	45.0		13.0	45.0		26.0	69.0	69.0	13.0	56.0	56.0
Total Split (%)	9.3%	32.1%		9.3%	32.1%		18.6%	49.3%	49.3%	9.3%	40.0%	40.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	6.5		5.0	6.5		5.0	7.0	7.0	5.0	7.0	7.0
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)	31.3	24.6	140.0	34.5	29.8	140.0	14.8	81.5	81.5	81.7	72.1	72.1
Actuated g/C Ratio	0.22	0.18	1.00	0.25	0.21	1.00	0.11	0.58	0.58	0.58	0.52	0.52
v/c Ratio	0.05	0.78	0.54	0.20	0.46	0.02	0.65	0.16	0.04	0.11	0.34	0.00
Control Delay (s/veh)	35.0	64.2	1.3	38.3	49.9	0.0	68.3	15.9	0.1	8.0	16.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	64.2	1.3	38.3	49.9	0.0	68.3	15.9	0.1	8.0	16.9	0.0
LOS	C	E	A	D	D	A	E	B	A	A	B	A
Approach Delay (s/veh)		24.2			44.5			34.9			16.0	
Approach LOS		C			D			C			B	
Queue Length 50th (ft)	7	228	0	24	138	0	108	79	0	12	181	0
Queue Length 95th (ft)	23	280	0	50	198	0	150	123	0	28	263	m0
Internal Link Dist (ft)		767			477			489			532	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	259	973	1583	181	973	1583	514	2060	965	646	1823	885
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	0.50	0.54	0.19	0.36	0.02	0.45	0.16	0.04	0.11	0.34	0.00

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Timings  
 1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
 AM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 27.2	Intersection LOS: C
Intersection Capacity Utilization 59.7%	ICU Level of Service B
Analysis Period (min) 15	

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
AM Peak Traffic Hour - Year 2028



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	209	111	147	254	466	367
Future Volume (vph)	209	111	147	254	466	367
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Satd. Flow (RTOR)		121				399
Lane Group Flow (vph)	227	121	160	276	507	399
Turn Type	Prot	Free	Prot	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free				Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	39.0		31.0	101.0	70.0	
Total Split (%)	27.9%		22.1%	72.1%	50.0%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	14.6	140.0	11.9	113.4	96.5	140.0
Actuated g/C Ratio	0.10	1.00	0.09	0.81	0.69	1.00
v/c Ratio	0.63	0.08	0.55	0.10	0.21	0.25
Control Delay (s/veh)	68.0	0.1	57.9	7.9	8.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.0	0.1	57.9	7.9	8.6	0.4
LOS	E	A	E	A	A	A
Approach Delay (s/veh)	44.4			26.2	5.0	
Approach LOS	D			C	A	
Queue Length 50th (ft)	105	0	74	66	82	0
Queue Length 95th (ft)	146	0	111	98	126	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	833	1583	637	2866	2439	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	0.08	0.25	0.10	0.21	0.25

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 95 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated

Timings  
2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
AM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 18.6

Intersection LOS: B

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings  
1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
PM Peak Traffic Hour - Year 2028

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	322	324	35	443	69	613	733	35	63	437	2
Future Volume (vph)	31	322	324	35	443	69	613	733	35	63	437	2
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.234			0.340			0.950			0.350		
Satd. Flow (perm)	436	3539	1583	633	3539	1583	3433	3539	1583	652	3539	1583
Satd. Flow (RTOR)			352			187			94			132
Lane Group Flow (vph)	34	350	352	38	482	75	666	797	38	68	475	2
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free			2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0	25.0	25.0	5.0	25.0	25.0
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	32.0	32.0	10.0	32.0	32.0
Total Split (s)	13.0	38.0		13.0	38.0		49.0	76.0	76.0	13.0	40.0	40.0
Total Split (%)	9.3%	27.1%		9.3%	27.1%		35.0%	54.3%	54.3%	9.3%	28.6%	28.6%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	5.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
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)	29.3	23.3	140.0	30.5	25.7	140.0	32.9	84.3	84.3	66.0	56.6	56.6
Actuated g/C Ratio	0.21	0.17	1.00	0.22	0.18	1.00	0.24	0.60	0.60	0.47	0.40	0.40
v/c Ratio	0.21	0.60	0.22	0.19	0.74	0.05	0.83	0.37	0.04	0.19	0.33	0.00
Control Delay (s/veh)	40.5	57.8	0.3	39.8	61.3	0.1	59.7	17.0	0.1	14.7	33.7	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)	40.5	57.8	0.3	39.8	61.3	0.1	59.7	17.0	0.1	14.7	33.7	0.0
LOS	D	E	A	D	E	A	E	B	A	B	C	A
Approach Delay (s/veh)		29.5			52.2			35.5			31.2	
Approach LOS		C			D			D			C	
Queue Length 50th (ft)	24	158	0	27	227	0	304	211	0	20	122	0
Queue Length 95th (ft)	50	202	0	54	278	0	352	295	0	63	232	m0
Internal Link Dist (ft)		767			477			489			630	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	168	834	1583	202	834	1583	1078	2131	990	378	1431	719
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.42	0.22	0.19	0.58	0.05	0.62	0.37	0.04	0.18	0.33	0.00

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated

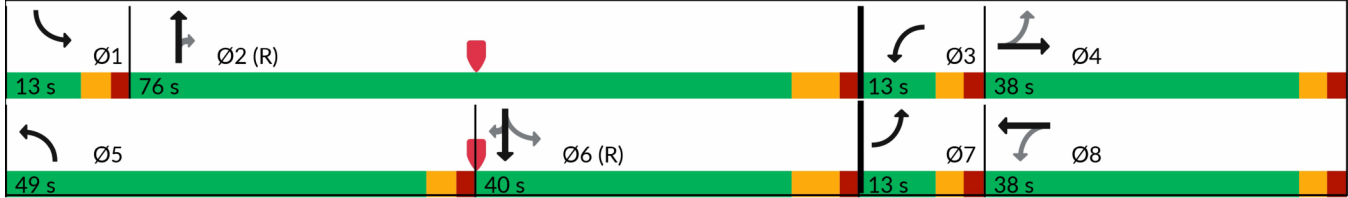
Timings  
 1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
 PM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 36.5	Intersection LOS: D
Intersection Capacity Utilization 73.9%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
 2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
 PM Peak Traffic Hour - Year 2028



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	525	130	348	528	349	343
Future Volume (vph)	525	130	348	528	349	343
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Satd. Flow (RTOR)		136				373
Lane Group Flow (vph)	571	141	378	574	379	373
Turn Type	Prot	Free	Prot	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free				Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	53.0		40.0	87.0	47.0	
Total Split (%)	37.9%		28.6%	62.1%	33.6%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	29.1	140.0	20.8	98.9	73.1	140.0
Actuated g/C Ratio	0.21	1.00	0.15	0.71	0.52	1.00
v/c Ratio	0.80	0.09	0.74	0.23	0.21	0.24
Control Delay (s/veh)	61.3	0.1	71.9	7.3	19.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.3	0.1	71.9	7.3	19.7	0.3
LOS	E	A	E	A	B	A
Approach Delay (s/veh)	49.2			32.9	10.1	
Approach LOS	D			C	B	
Queue Length 50th (ft)	261	0	189	78	95	0
Queue Length 95th (ft)	309	0	242	109	153	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	1177	1583	858	2499	1847	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	0.49	0.09	0.44	0.23	0.21	0.24

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 6 (4%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated

Timings  
 2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
 PM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.80	
Intersection Signal Delay (s/veh): 30.6	Intersection LOS: C
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings

1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
AM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	625	1093	45	446	50	298	452	50	90	844	3
Future Volume (vph)	15	625	1093	45	446	50	298	452	50	90	844	3
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.363			0.158			0.950			0.473		
Satd. Flow (perm)	676	3539	1583	294	3539	1583	3433	3539	1583	881	3539	1583
Satd. Flow (RTOR)			538			199			105			144
Lane Group Flow (vph)	16	679	1188	49	485	54	324	491	54	98	917	3
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free			2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	20.0	20.0	6.0	20.0	20.0
Minimum Split (s)	11.0	12.5		11.0	12.5		11.0	27.0	27.0	11.0	27.0	27.0
Total Split (s)	11.0	45.0		11.0	45.0		26.0	73.0	73.0	11.0	58.0	58.0
Total Split (%)	7.9%	32.1%		7.9%	32.1%		18.6%	52.1%	52.1%	7.9%	41.4%	41.4%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	6.5		5.0	6.5		5.0	7.0	7.0	5.0	7.0	7.0
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)	38.7	32.4	140.0	40.7	36.8	140.0	18.0	72.8	72.8	71.9	62.3	62.3
Actuated g/C Ratio	0.28	0.23	1.00	0.29	0.26	1.00	0.13	0.52	0.52	0.51	0.45	0.45
v/c Ratio	0.07	0.83	0.75	0.33	0.52	0.03	0.74	0.27	0.06	0.20	0.58	0.00
Control Delay (s/veh)	31.1	60.4	3.3	37.7	46.0	0.0	68.9	20.5	0.1	23.0	39.7	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)	31.1	60.4	3.3	37.7	46.0	0.0	68.9	20.5	0.1	23.0	39.7	0.0
LOS	C	E	A	D	D	A	E	C	A	C	D	A
Approach Delay (s/veh)		24.1			41.1			37.3			38.0	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	10	315	0	31	187	0	150	137	0	43	278	0
Queue Length 95th (ft)	26	370	0	60	257	0	200	185	0	m106	447	m0
Internal Link Dist (ft)		767			477			489			532	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	233	973	1583	148	1010	1583	514	1839	873	500	1575	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.70	0.75	0.33	0.48	0.03	0.63	0.27	0.06	0.20	0.58	0.00

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated

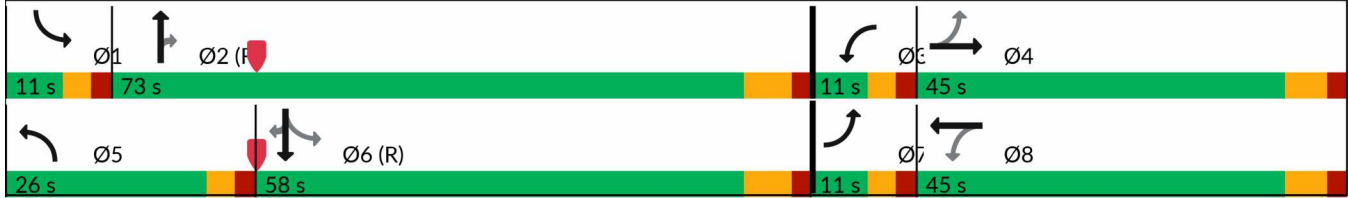
Timings  
 1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
 AM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 32.3	Intersection LOS: C
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
AM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	89	357	21	52	34	408	765	17	45	944	495
Future Volume (vph)	383	89	357	21	52	34	408	765	17	45	944	495
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			388			218			218			425
Lane Group Flow (vph)	416	97	388	23	57	37	443	832	18	49	1026	538
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)	6.0	6.0		5.0	5.0		6.0	25.0		5.0	25.0	
Minimum Split (s)	11.0	11.0		9.5	22.5		11.0	32.0		9.5	32.0	
Total Split (s)	28.0	39.9		10.6	22.5		30.0	75.5		14.0	59.5	
Total Split (%)	20.0%	28.5%		7.6%	16.1%		21.4%	53.9%		10.0%	42.5%	
Yellow Time (s)	3.0	3.0		3.5	3.5		3.0	5.0		3.5	5.0	
All-Red Time (s)	2.0	2.0		1.0	1.0		2.0	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)	5.0	5.0		4.5	4.5		5.0	7.0		4.5	7.0	
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)	21.0	26.7	140.0	6.0	9.7	140.0	23.2	83.3	140.0	9.2	66.8	140.0
Actuated g/C Ratio	0.15	0.19	1.00	0.04	0.07	1.00	0.17	0.60	1.00	0.07	0.48	1.00
v/c Ratio	0.81	0.27	0.25	0.31	0.45	0.02	0.78	0.40	0.01	0.42	0.61	0.34
Control Delay (s/veh)	70.5	49.6	0.4	75.6	72.7	0.0	66.1	16.6	0.0	72.8	31.1	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	70.5	49.6	0.4	75.6	72.7	0.0	66.1	16.6	0.0	72.8	31.1	0.6
LOS	E	D	A	E	E	A	E	B	A	E	C	A
Approach Delay (s/veh)		38.1			50.3			33.4			22.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	192	78	0	21	52	0	212	198	0	44	378	0
Queue Length 95th (ft)	251	129	0	53	98	0	265	260	0	87	517	0
Internal Link Dist (ft)		374			387			843			738	
Turn Bay Length (ft)	435			150			850		150	150		390
Base Capacity (vph)	563	464	1583	77	239	1583	632	2104	1583	131	1689	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	0.74	0.21	0.25	0.30	0.24	0.02	0.70	0.40	0.01	0.37	0.61	0.34

Intersection Summary

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

Timings  
 2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
 AM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 30.4	Intersection LOS: C
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings  
1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	450	443	50	617	101	839	1086	44	167	646	3
Future Volume (vph)	44	450	443	50	617	101	839	1086	44	167	646	3
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.132			0.267			0.950			0.239		
Satd. Flow (perm)	246	3539	1583	497	3539	1583	3433	3539	1583	445	3539	1583
Satd. Flow (RTOR)			482			187			94			132
Lane Group Flow (vph)	48	489	482	54	671	110	912	1180	48	182	702	3
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free			2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0	25.0	25.0	5.0	25.0	25.0
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	32.0	32.0	10.0	32.0	32.0
Total Split (s)	11.0	38.0		11.0	38.0		50.0	72.0	72.0	19.0	41.0	41.0
Total Split (%)	7.9%	27.1%		7.9%	27.1%		35.7%	51.4%	51.4%	13.6%	29.3%	29.3%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	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)	5.0	5.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
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)	35.2	30.4	140.0	35.2	30.4	140.0	41.7	72.5	72.5	55.4	42.1	42.1
Actuated g/C Ratio	0.25	0.22	1.00	0.25	0.22	1.00	0.30	0.52	0.52	0.40	0.30	0.30
v/c Ratio	0.38	0.64	0.30	0.30	0.87	0.07	0.89	0.64	0.06	0.64	0.66	0.01
Control Delay (s/veh)	43.5	53.7	0.5	39.6	66.1	0.1	58.7	28.0	0.1	36.7	72.9	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)	43.5	53.7	0.5	39.6	66.1	0.1	58.7	28.0	0.1	36.7	72.9	0.0
LOS	D	D	A	D	E	A	E	C	A	D	E	A
Approach Delay (s/veh)		28.0			55.7			40.4			65.2	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)	32	215	0	36	314	0	411	428	0	146	352	0
Queue Length 95th (ft)	64	274	0	70	386	0	488	539	1	m175	m393	m0
Internal Link Dist (ft)		767			477			489			630	
Turn Bay Length (ft)	210		610	825		715	230		270	295		190
Base Capacity (vph)	126	834	1583	179	834	1583	1103	1833	865	317	1065	568
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	0.38	0.59	0.30	0.30	0.80	0.07	0.83	0.64	0.06	0.57	0.66	0.01

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated

Timings  
 1: U.S. Highway 24 & Meridian Road

Background Traffic Conditions  
 PM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 45.0

Intersection LOS: D

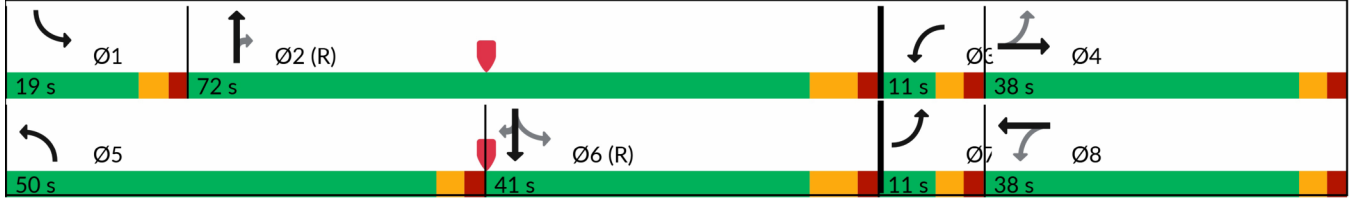
Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	816	184	240	28	191	114	459	1632	68	67	1081	464
Future Volume (vph)	816	184	240	28	191	114	459	1632	68	67	1081	464
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			261			218			218			348
Lane Group Flow (vph)	887	200	261	30	208	124	499	1774	74	73	1175	504
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)	6.0	6.0		5.0	5.0		6.0	25.0		5.0	25.0	
Minimum Split (s)	11.0	11.0		9.5	22.5		11.0	32.0		9.5	32.0	
Total Split (s)	36.0	47.4		11.1	22.5		25.0	71.5		10.0	56.5	
Total Split (%)	25.7%	33.9%		7.9%	16.1%		17.9%	51.1%		7.1%	40.4%	
Yellow Time (s)	3.0	3.0		3.5	3.5		3.0	5.0		3.5	5.0	
All-Red Time (s)	2.0	2.0		1.0	1.0		2.0	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)	5.0	5.0		4.5	4.5		5.0	7.0		4.5	7.0	
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)	31.0	46.4	140.0	6.4	17.5	140.0	20.5	64.5	140.0	6.0	49.5	140.0
Actuated g/C Ratio	0.22	0.33	1.00	0.05	0.13	1.00	0.15	0.46	1.00	0.04	0.35	1.00
v/c Ratio	1.17	0.32	0.16	0.38	0.89	0.08	0.99	1.09	0.05	0.97	0.94	0.32
Control Delay (s/veh)	136.4	38.0	0.2	78.1	96.9	0.1	107.1	80.9	0.1	161.8	58.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	136.4	38.0	0.2	78.1	96.9	0.1	107.1	80.9	0.1	161.8	58.5	0.5
LOS	F	D	A	E	F	A	F	F	A	F	E	A
Approach Delay (s/veh)		95.4			62.2			84.0			46.1	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	~501	145	0	27	192	0	~255	~946	0	~73	552	0
Queue Length 95th (ft)	#635	218	0	64	#336	0	#373	#1092	m0	#183	#696	0
Internal Link Dist (ft)		374			318			843			738	
Turn Bay Length (ft)	435			150			850		150	150		390
Base Capacity (vph)	760	616	1583	83	239	1583	502	1630	1583	75	1251	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.32	0.16	0.36	0.87	0.08	0.99	1.09	0.05	0.97	0.94	0.32

Intersection Summary

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

Timings

2: U.S. Highway 24 & E Woodmen Road

Background Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 1.17

Intersection Signal Delay (s/veh): 73.8

Intersection LOS: E

Intersection Capacity Utilization 100.1%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

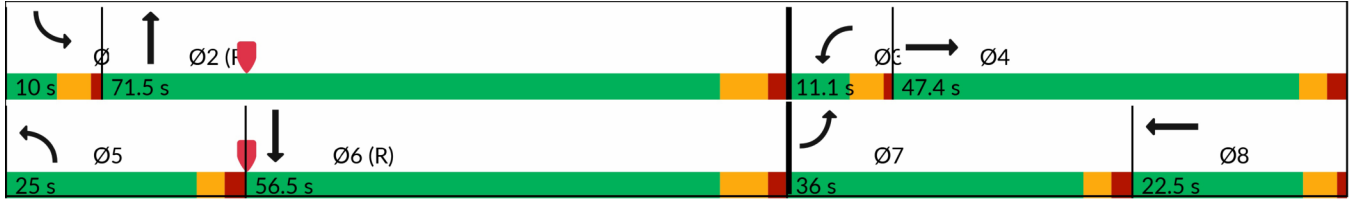
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
AM Peak Traffic Hour - Year 2028

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	446	785	32	319	34	214	326	35	19	63	618
Future Volume (vph)	11	446	785	32	319	34	214	326	35	19	63	618
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	0	1770	3539
Flt Permitted	0.487			0.229			0.950				0.540	
Satd. Flow (perm)	907	3539	1583	427	3539	1583	3433	3539	1583	0	1006	3539
Satd. Flow (RTOR)			595			199			105			
Lane Group Flow (vph)	12	485	853	35	347	37	233	354	38	0	89	672
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	custom	pm+pt	NA
Protected Phases	7	4		3	8		5	2			1	6
Permitted Phases	4		Free	8		Free			2	1	6	
Detector Phase	7	4		3	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	20.0	20.0	6.0	6.0	20.0
Minimum Split (s)	11.0	12.5		11.0	12.5		11.0	27.0	27.0	11.0	11.0	27.0
Total Split (s)	13.0	45.0		13.0	45.0		26.0	69.0	69.0	13.0	13.0	56.0
Total Split (%)	9.3%	32.1%		9.3%	32.1%		18.6%	49.3%	49.3%	9.3%	9.3%	40.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	5.0	5.0	3.0	3.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		5.0	7.0	7.0		5.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lead	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	None	C-Max
Act Effct Green (s)	31.3	24.6	140.0	34.5	29.8	140.0	14.8	78.7	78.7		82.3	72.1
Actuated g/C Ratio	0.22	0.18	1.00	0.25	0.21	1.00	0.11	0.56	0.56		0.59	0.52
v/c Ratio	0.05	0.78	0.54	0.20	0.46	0.02	0.65	0.18	0.04		0.14	0.37
Control Delay (s/veh)	35.1	64.2	1.3	38.3	49.9	0.0	68.3	16.7	0.1		8.6	17.2
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)	35.1	64.2	1.3	38.3	49.9	0.0	68.3	16.7	0.1		8.6	17.2
LOS	D	E	A	D	D	A	E	B	A		A	B
Approach Delay (s/veh)		24.2			44.5			34.9				16.2
Approach LOS		C			D			C				B
Queue Length 50th (ft)	8	228	0	24	138	0	108	84	0		19	197
Queue Length 95th (ft)	24	280	0	50	198	0	150	130	0		40	284
Internal Link Dist (ft)		767			477			489				532
Turn Bay Length (ft)	210		610	825		715	230		270		295	
Base Capacity (vph)	259	973	1583	181	973	1583	514	1990	936		642	1823
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	0.05	0.50	0.54	0.19	0.36	0.02	0.45	0.18	0.04		0.14	0.37

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Lane Group	SBR
Lane Configurations	7
Traffic Volume (vph)	2
Future Volume (vph)	2
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	144
Lane Group Flow (vph)	2
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Detector Phase	6
Switch Phase	
Minimum Initial (s)	20.0
Minimum Split (s)	27.0
Total Split (s)	56.0
Total Split (%)	40.0%
Yellow Time (s)	5.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	7.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	C-Max
Act Effct Green (s)	72.1
Actuated g/C Ratio	0.52
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	m0
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	885
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.00

Intersection Summary

Timings  
 1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
 AM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 27.1

Intersection LOS: C

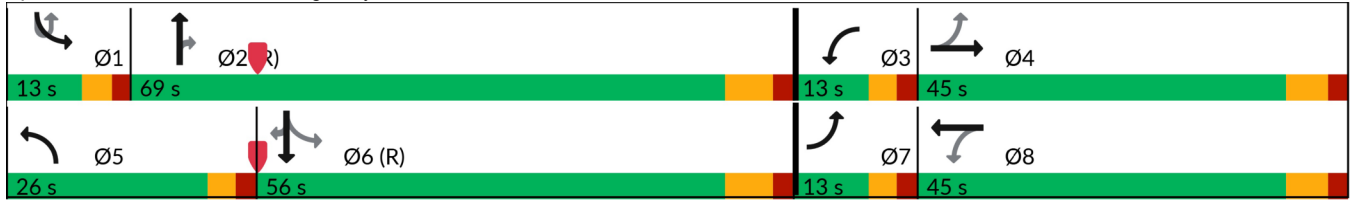
Intersection Capacity Utilization 60.1%

ICU Level of Service B

Analysis Period (min) 15

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings  
 2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
 AM Peak Traffic Hour - Year 2028



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	209	127	196	265	469	367
Future Volume (vph)	209	127	196	265	469	367
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Satd. Flow (RTOR)		138				399
Lane Group Flow (vph)	227	138	213	288	510	399
Turn Type	Prot	Free	Prot	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free				Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	39.0		31.0	101.0	70.0	
Total Split (%)	27.9%		22.1%	72.1%	50.0%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	14.6	140.0	14.0	113.4	94.4	140.0
Actuated g/C Ratio	0.10	1.00	0.10	0.81	0.67	1.00
v/c Ratio	0.63	0.09	0.62	0.10	0.21	0.25
Control Delay (s/veh)	68.0	0.1	58.6	7.0	9.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.0	0.1	58.6	7.0	9.5	0.4
LOS	E	A	E	A	A	A
Approach Delay (s/veh)	42.4			28.9	5.5	
Approach LOS	D			C	A	
Queue Length 50th (ft)	105	0	99	63	87	0
Queue Length 95th (ft)	146	0	139	94	134	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	833	1583	637	2866	2386	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	0.09	0.33	0.10	0.21	0.25

Intersection Summary

Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 95 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated

Timings  
2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
AM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.63

Intersection Signal Delay (s/veh): 19.7

Intersection LOS: B

Intersection Capacity Utilization 46.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗		↑↑
Traffic Vol, veh/h	49	60	401	34	0	596
Future Vol, veh/h	49	60	401	34	0	596
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	-	-
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	53	65	436	37	0	648

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	760	218	0	0	-
Stage 1	436	-	-	-	-
Stage 2	324	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	-
Pot Cap-1 Maneuver	342	786	-	-	0
Stage 1	619	-	-	-	0
Stage 2	706	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	342	786	-	-	-
Mov Cap-2 Maneuver	342	-	-	-	-
Stage 1	619	-	-	-	-
Stage 2	706	-	-	-	-
























Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.51	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	497
HCM Lane V/C Ratio	-	-	0.239
HCM Ctrl Dly (s/v)	-	-	14.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.9

Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2028

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	36	322	324	35	443	69	613	779	31	62	116	464
Future Volume (vph)	36	322	324	35	443	69	613	779	31	62	116	464
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	0	1770	3539
Flt Permitted	0.201			0.358			0.950				0.334	
Satd. Flow (perm)	374	3539	1583	667	3539	1583	3433	3539	1583	0	622	3539
Satd. Flow (RTOR)			352			187			94			
Lane Group Flow (vph)	39	350	352	38	482	75	666	847	34	0	193	504
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	custom	pm+pt	NA
Protected Phases	7	4		3	8		5	2			1	6
Permitted Phases	4		Free	8		Free			2	1	6	
Detector Phase	7	4		3	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0	25.0	25.0	5.0	5.0	25.0
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	32.0	32.0	10.0	10.0	32.0
Total Split (s)	11.0	36.0		11.0	36.0		46.0	83.0	83.0	10.0	10.0	47.0
Total Split (%)	7.9%	25.7%		7.9%	25.7%		32.9%	59.3%	59.3%	7.1%	7.1%	33.6%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	3.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	7.0	7.0		5.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lead	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	None	C-Max
Act Effct Green (s)	29.0	24.2	140.0	29.0	24.2	140.0	32.8	80.8	80.8		68.3	57.2
Actuated g/C Ratio	0.21	0.17	1.00	0.21	0.17	1.00	0.23	0.58	0.58		0.49	0.41
v/c Ratio	0.28	0.57	0.22	0.21	0.79	0.05	0.83	0.41	0.04		0.51	0.35
Control Delay (s/veh)	43.8	56.4	0.3	41.1	64.9	0.1	60.2	18.2	0.1		25.0	28.6
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)	43.8	56.4	0.3	41.1	64.9	0.1	60.2	18.2	0.1		25.0	28.6
LOS	D	E	A	D	E	A	E	B	A		C	C
Approach Delay (s/veh)		29.1			55.2			35.8				27.5
Approach LOS		C			E			D				C
Queue Length 50th (ft)	28	158	0	27	227	0	304	240	0		60	125
Queue Length 95th (ft)	57	202	0	55	279	0	353	292	0		#156	194
Internal Link Dist (ft)		767			477			489				630
Turn Bay Length (ft)	210		610	825		715	230		270		295	
Base Capacity (vph)	137	783	1583	185	783	1583	1005	2043	953		378	1445
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	0.28	0.45	0.22	0.21	0.62	0.05	0.66	0.41	0.04		0.51	0.35

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Lane Group	SBR
Lane Configurations	7
Traffic Volume (vph)	2
Future Volume (vph)	2
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	132
Lane Group Flow (vph)	2
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Detector Phase	6
Switch Phase	
Minimum Initial (s)	25.0
Minimum Split (s)	32.0
Total Split (s)	47.0
Total Split (%)	33.6%
Yellow Time (s)	5.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	7.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	C-Max
Act Effct Green (s)	57.2
Actuated g/C Ratio	0.41
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	m0
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	724
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.00
Intersection Summary	

Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2028

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 36.0

Intersection LOS: D

Intersection Capacity Utilization 73.9%

ICU Level of Service D

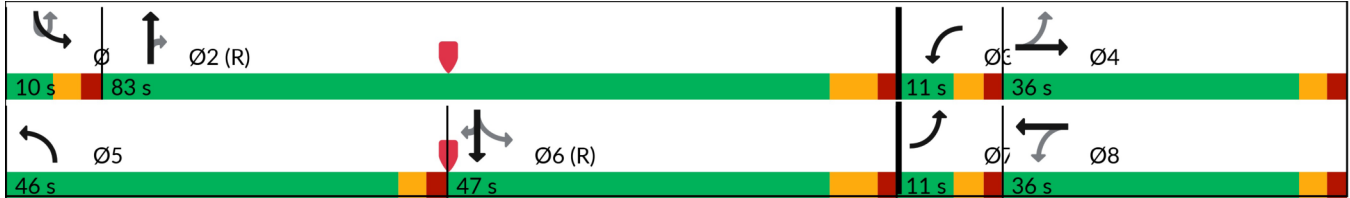
Analysis Period (min) 15

# 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: 1: U.S. Highway 24 & Meridian Road



Timings  
2: U.S. Highway 24 & E Woodmen Road

TotalTraffic Conditions  
PM Peak Traffic Hour - Year 2028

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	525	181	379	535	360	343
Future Volume (vph)	525	181	379	535	360	343
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3393	1583	3433	3539	3539	1583
Satd. Flow (RTOR)		190				373
Lane Group Flow (vph)	571	197	412	582	391	373
Turn Type	Prot	Free	Prot	NA	NA	Free
Protected Phases	4		5	2	6	
Permitted Phases		Free				Free
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	6.0		6.0	25.0	25.0	
Minimum Split (s)	11.0		11.0	32.0	32.0	
Total Split (s)	53.0		40.0	87.0	47.0	
Total Split (%)	37.9%		28.6%	62.1%	33.6%	
Yellow Time (s)	3.0		3.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		5.0	7.0	7.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effct Green (s)	29.1	140.0	22.1	98.9	71.8	140.0
Actuated g/C Ratio	0.21	1.00	0.16	0.71	0.51	1.00
v/c Ratio	0.80	0.12	0.76	0.23	0.22	0.24
Control Delay (s/veh)	61.3	0.2	66.0	7.8	20.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.3	0.2	66.0	7.8	20.5	0.3
LOS	E	A	E	A	C	A
Approach Delay (s/veh)	45.6			31.9	10.7	
Approach LOS	D			C	B	
Queue Length 50th (ft)	261	0	200	90	101	0
Queue Length 95th (ft)	309	0	260	125	161	0
Internal Link Dist (ft)	374			843	738	
Turn Bay Length (ft)	435		850			390
Base Capacity (vph)	1177	1583	858	2499	1813	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	0.49	0.12	0.48	0.23	0.22	0.24
<b>Intersection Summary</b>						
Cycle Length: 140						
Actuated Cycle Length: 140						
Offset: 6 (4%), Referenced to phase 2:NBT and 6:SBT, Start of Green						
Natural Cycle: 60						
Control Type: Actuated-Coordinated						

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 29.7

Intersection LOS: C

Intersection Capacity Utilization 60.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



**Intersection**

Int Delay, s/veh 1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗		↑↑
Traffic Vol, veh/h	31	38	876	113	0	541
Future Vol, veh/h	31	38	876	113	0	541
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	-	-
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	34	41	952	123	0	588

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1246	476	0
Stage 1	952	-	-
Stage 2	294	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	166	535	-
Stage 1	335	-	-
Stage 2	730	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	166	535	-
Mov Cap-2 Maneuver	166	-	-
Stage 1	335	-	-
Stage 2	730	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	23.63	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	267
HCM Lane V/C Ratio	-	-	0.28
HCM Ctrl Dly (s/v)	-	-	23.6
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	1.1

Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
AM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	16	625	1093	45	446	50	298	466	50	19	90	887
Future Volume (vph)	16	625	1093	45	446	50	298	466	50	19	90	887
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	0	1770	3539
Flt Permitted	0.363			0.158			0.950				0.465	
Satd. Flow (perm)	676	3539	1583	294	3539	1583	3433	3539	1583	0	866	3539
Satd. Flow (RTOR)			535				199		105			
Lane Group Flow (vph)	17	679	1188	49	485	54	324	507	54	0	119	964
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	custom	pm+pt	NA
Protected Phases	7	4		3	8		5	2			1	6
Permitted Phases	4		Free	8		Free			2	1	6	
Detector Phase	7	4		3	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	20.0	20.0	6.0	6.0	20.0
Minimum Split (s)	11.0	12.5		11.0	12.5		11.0	27.0	27.0	11.0	11.0	27.0
Total Split (s)	11.0	45.0		11.0	45.0		26.0	73.0	73.0	11.0	11.0	58.0
Total Split (%)	7.9%	32.1%		7.9%	32.1%		18.6%	52.1%	52.1%	7.9%	7.9%	41.4%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	5.0	5.0	3.0	3.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	6.5		5.0	6.5		5.0	7.0	7.0		5.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lead	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	None	C-Max
Act Effct Green (s)	38.7	32.4	140.0	40.7	36.8	140.0	18.0	72.5	72.5		72.2	62.3
Actuated g/C Ratio	0.28	0.23	1.00	0.29	0.26	1.00	0.13	0.52	0.52		0.52	0.45
v/c Ratio	0.07	0.83	0.75	0.33	0.52	0.03	0.74	0.28	0.06		0.24	0.61
Control Delay (s/veh)	31.1	60.4	3.3	37.7	46.0	0.0	68.9	20.8	0.1		24.4	42.0
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)	31.1	60.4	3.3	37.7	46.0	0.0	68.9	20.8	0.1		24.4	42.0
LOS	C	E	A	D	D	A	E	C	A		C	D
Approach Delay (s/veh)		24.1			41.1			37.1				39.9
Approach LOS		C			D			D				D
Queue Length 50th (ft)	11	315	0	31	187	0	150	144	0		57	315
Queue Length 95th (ft)	28	370	0	60	257	0	200	192	0		126	482
Internal Link Dist (ft)		767			477			489				532
Turn Bay Length (ft)	210		610	825		715	230		270		295	
Base Capacity (vph)	233	973	1583	148	1010	1583	514	1832	869		497	1575
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	0.07	0.70	0.75	0.33	0.48	0.03	0.63	0.28	0.06		0.24	0.61

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Lane Group	SBR
Lane Configurations	7
Traffic Volume (vph)	3
Future Volume (vph)	3
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	144
Lane Group Flow (vph)	3
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Detector Phase	6
Switch Phase	
Minimum Initial (s)	20.0
Minimum Split (s)	27.0
Total Split (s)	58.0
Total Split (%)	41.4%
Yellow Time (s)	5.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	7.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	C-Max
Act Effct Green (s)	62.3
Actuated g/C Ratio	0.45
v/c Ratio	0.00
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	m0
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	784
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.00

Intersection Summary

Timings  
 1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
 AM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 32.8

Intersection LOS: C

Intersection Capacity Utilization 74.9%

ICU Level of Service D

Analysis Period (min) 15

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

























Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings

2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
AM Peak Traffic Hour - Year 2045

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	89	373	21	52	34	457	776	17	45	947	495
Future Volume (vph)	383	89	373	21	52	34	457	776	17	45	947	495
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			405			218			218			424
Lane Group Flow (vph)	416	97	405	23	57	37	497	843	18	49	1029	538
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)	6.0	6.0		5.0	5.0		6.0	25.0		5.0	25.0	
Minimum Split (s)	11.0	11.0		9.5	22.5		11.0	32.0		9.5	32.0	
Total Split (s)	27.0	38.9		10.6	22.5		31.0	76.5		14.0	59.5	
Total Split (%)	19.3%	27.8%		7.6%	16.1%		22.1%	54.6%		10.0%	42.5%	
Yellow Time (s)	3.0	3.0		3.5	3.5		3.0	5.0		3.5	5.0	
All-Red Time (s)	2.0	2.0		1.0	1.0		2.0	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)	5.0	5.0		4.5	4.5		5.0	7.0		4.5	7.0	
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)	20.6	26.3	140.0	6.0	9.7	140.0	25.3	83.7	140.0	9.2	65.1	140.0
Actuated g/C Ratio	0.15	0.19	1.00	0.04	0.07	1.00	0.18	0.60	1.00	0.07	0.47	1.00
v/c Ratio	0.83	0.28	0.26	0.31	0.45	0.02	0.80	0.40	0.01	0.42	0.63	0.34
Control Delay (s/veh)	72.2	50.1	0.4	75.6	72.7	0.0	65.8	16.4	0.0	72.8	32.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.2	50.1	0.4	75.6	72.7	0.0	65.8	16.4	0.0	72.8	32.6	0.6
LOS	E	D	A	E	E	A	E	B	A	E	C	A
Approach Delay (s/veh)		38.2			50.3			34.3			23.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	192	78	0	21	52	0	238	201	0	44	391	0
Queue Length 95th (ft)	253	130	0	53	98	0	293	263	0	87	527	0
Internal Link Dist (ft)		374			274			843			738	
Turn Bay Length (ft)	435			150			850					390
Base Capacity (vph)	539	451	1583	77	239	1583	668	2114	1583	131	1645	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	0.77	0.22	0.26	0.30	0.24	0.02	0.74	0.40	0.01	0.37	0.63	0.34

Intersection Summary

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

Timings  
 2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
 AM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 31.2	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



**Intersection**

Int Delay, s/veh 9.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗		↑↑
Traffic Vol, veh/h	49	60	1190	34	0	1341
Future Vol, veh/h	49	60	1190	34	0	1341
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	-	-
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	53	65	1293	37	0	1458

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2022	647	0	0	-
Stage 1	1293	-	-	-	-
Stage 2	729	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	-
Pot Cap-1 Maneuver	~ 50	414	-	-	0
Stage 1	221	-	-	-	0
Stage 2	438	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 50	414	-	-	-
Mov Cap-2 Maneuver	~ 50	-	-	-	-
Stage 1	221	-	-	-	-
Stage 2	438	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	240.72	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	97
HCM Lane V/C Ratio	-	-	1.216
HCM Ctrl Dly (s/v)	-	-	240.7
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	8.1

**Notes**

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

Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	49	450	443	50	617	101	839	1132	44	62	167	673
Future Volume (vph)	49	450	443	50	617	101	839	1132	44	62	167	673
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	0	1770	3539
Flt Permitted	0.132			0.267			0.950				0.194	
Satd. Flow (perm)	246	3539	1583	497	3539	1583	3433	3539	1583	0	361	3539
Satd. Flow (RTOR)			482			187			94			
Lane Group Flow (vph)	53	489	482	54	671	110	912	1230	48	0	249	732
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	custom	pm+pt	NA
Protected Phases	7	4		3	8		5	2			1	6
Permitted Phases	4		Free	8		Free			2	1	6	
Detector Phase	7	4		3	8		5	2	2	1	1	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0	25.0	25.0	5.0	5.0	25.0
Minimum Split (s)	11.0	11.0		11.0	11.0		10.0	32.0	32.0	10.0	10.0	32.0
Total Split (s)	11.0	38.0		11.0	38.0		50.0	72.0	72.0	19.0	19.0	41.0
Total Split (%)	7.9%	27.1%		7.9%	27.1%		35.7%	51.4%	51.4%	13.6%	13.6%	29.3%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	5.0	5.0	3.0	3.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	7.0	7.0		5.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lead	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	None	C-Max
Act Effct Green (s)	35.2	30.4	140.0	35.2	30.4	140.0	41.7	69.4	69.4		58.6	42.1
Actuated g/C Ratio	0.25	0.22	1.00	0.25	0.22	1.00	0.30	0.50	0.50		0.42	0.30
v/c Ratio	0.42	0.64	0.30	0.30	0.87	0.07	0.89	0.70	0.06		0.84	0.69
Control Delay (s/veh)	45.2	53.7	0.5	39.6	66.1	0.1	58.7	31.2	0.1		51.0	72.4
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)	45.2	53.7	0.5	39.6	66.1	0.1	58.7	31.2	0.1		51.0	72.4
LOS	D	D	A	D	E	A	E	C	A		D	E
Approach Delay (s/veh)		28.2			55.7			42.0				66.7
Approach LOS		C			E			D				E
Queue Length 50th (ft)	35	215	0	36	314	0	411	483	0		200	366
Queue Length 95th (ft)	69	274	0	70	386	0	488	574	1		m#255	m402
Internal Link Dist (ft)		767			477			489				630
Turn Bay Length (ft)	210		610	825		715	230		270		295	
Base Capacity (vph)	126	834	1583	179	834	1583	1103	1753	831		301	1065
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	0.59	0.30	0.30	0.80	0.07	0.83	0.70	0.06		0.83	0.69

Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Lane Group	SBR
Lane Configurations	7
Traffic Volume (vph)	3
Future Volume (vph)	3
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	132
Lane Group Flow (vph)	3
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Detector Phase	6
Switch Phase	
Minimum Initial (s)	25.0
Minimum Split (s)	32.0
Total Split (s)	41.0
Total Split (%)	29.3%
Yellow Time (s)	5.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	7.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	C-Max
Act Effct Green (s)	42.1
Actuated g/C Ratio	0.30
v/c Ratio	0.01
Control Delay (s/veh)	0.0
Queue Delay	0.0
Total Delay (s/veh)	0.0
LOS	A
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	m0
Internal Link Dist (ft)	
Turn Bay Length (ft)	190
Base Capacity (vph)	568
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.01
Intersection Summary	

Timings

1: U.S. Highway 24 & Meridian Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 46.3

Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

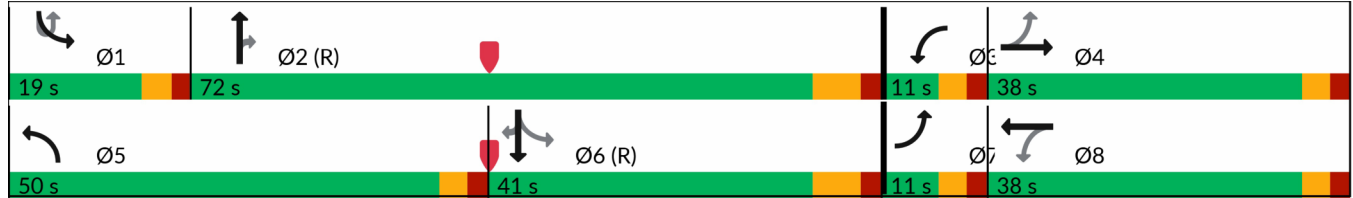
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 1: U.S. Highway 24 & Meridian Road



Timings

2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	816	184	291	28	191	114	490	1639	68	67	1092	464
Future Volume (vph)	816	184	291	28	191	114	490	1639	68	67	1092	464
Satd. Flow (prot)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Satd. Flow (RTOR)			316			218			218			344
Lane Group Flow (vph)	887	200	316	30	208	124	533	1782	74	73	1187	504
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)	6.0	6.0		5.0	5.0		6.0	25.0		5.0	25.0	
Minimum Split (s)	11.0	11.0		9.5	22.5		11.0	32.0		9.5	32.0	
Total Split (s)	36.0	47.4		11.1	22.5		26.0	71.5		10.0	55.5	
Total Split (%)	25.7%	33.9%		7.9%	16.1%		18.6%	51.1%		7.1%	39.6%	
Yellow Time (s)	3.0	3.0		3.5	3.5		3.0	5.0		3.5	5.0	
All-Red Time (s)	2.0	2.0		1.0	1.0		2.0	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)	5.0	5.0		4.5	4.5		5.0	7.0		4.5	7.0	
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)	31.0	46.4	140.0	6.4	17.5	140.0	21.5	64.5	140.0	6.0	48.5	140.0
Actuated g/C Ratio	0.22	0.33	1.00	0.05	0.13	1.00	0.15	0.46	1.00	0.04	0.35	1.00
v/c Ratio	1.17	0.32	0.20	0.38	0.89	0.08	1.01	1.09	0.05	0.97	0.97	0.32
Control Delay (s/veh)	136.4	38.0	0.3	78.1	96.9	0.1	108.8	84.5	0.1	161.8	64.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	136.4	38.0	0.3	78.1	96.9	0.1	108.8	84.5	0.1	161.8	64.1	0.5
LOS	F	D	A	E	F	A	F	F	A	F	E	A
Approach Delay (s/veh)		91.7			62.2			87.3			50.0	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	~501	145	0	27	192	0	~277	~956	0	~73	566	0
Queue Length 95th (ft)	#635	218	0	64	#336	0	m#398	#1105	m0	#183	#721	0
Internal Link Dist (ft)		374			297			843			738	
Turn Bay Length (ft)	435			150			50					390
Base Capacity (vph)	760	616	1583	83	239	1583	526	1630	1583	75	1226	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.32	0.20	0.36	0.87	0.08	1.01	1.09	0.05	0.97	0.97	0.32

Intersection Summary

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

Timings

2: U.S. Highway 24 & E Woodmen Road

Total Traffic Conditions  
PM Peak Traffic Hour - Year 2045

Maximum v/c Ratio: 1.17

Intersection Signal Delay (s/veh): 75.7

Intersection LOS: E

Intersection Capacity Utilization 100.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

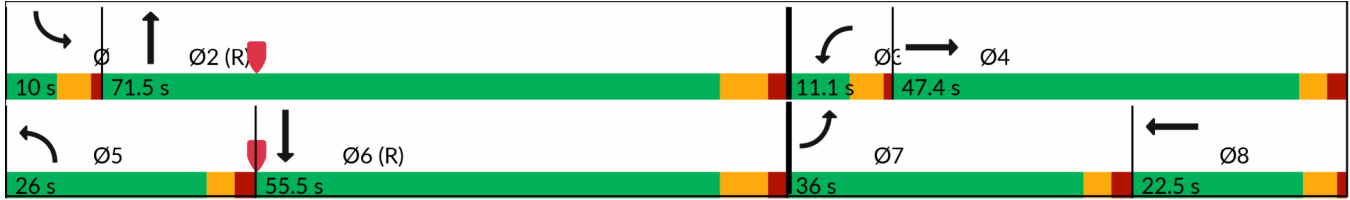
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 2: U.S. Highway 24 & E Woodmen Road



Intersection						
Int Delay, s/veh	33					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗		↑↑
Traffic Vol, veh/h	31	38	2159	113	0	1411
Future Vol, veh/h	31	38	2159	113	0	1411
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	-	-
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	34	41	2347	123	0	1534

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	3114	1173	0	0	-
Stage 1	2347	-	-	-	-
Stage 2	767	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	-
Pot Cap-1 Maneuver	~ 9	185	-	-	0
Stage 1	58	-	-	-	0
Stage 2	419	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 9	185	-	-	-
Mov Cap-2 Maneuver	~ 9	-	-	-	-
Stage 1	58	-	-	-	-
Stage 2	419	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 1791.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	19
HCM Lane V/C Ratio	-	-	4.046
HCM Ctrl Dly (s/v)	-	\$ 1791.8	-
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	9.9

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