TRAFFIC IMPACT REPORT

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NORTH FRENCH ROAD RESIDENTIAL DEVELOPMENT

TOWN OF AMHERST, NY

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1.0 EXECUTIVE SUMMARY

The purpose of this report is to evaluate the potential traffic impacts related to the proposed residential development located along North French Road in the Town of Amherst, NY. Within this report, the operating characteristics of the proposed access points and impacts to the adjacent roadway network are evaluated and mitigating measures are identified (if needed) to minimize operational concerns.

To define traffic impact, this analysis establishes existing baseline traffic conditions, projects background traffic flow including area growth, and determines the traffic operations that would result from the proposed project.

Project Location and Description

The project site is located along the north side of North French Road, between I-990 and Crosspoint Pkwy, in the Town of Amherst, Erie County, New York The project site is bounded by I-990 to the north and west, an office building and Crosspoint Pkwy to the east, and North French Rd to the south. Land uses in the vicinity of the proposed project include commercial and residential.

The proposed project consists of 36 single family lots situated along a new private roadway, 17 townhome buildings containing a total of 69 units, and two two-story apartment buildings containing a total of 20 units. Access to the site will be provided via one full access driveway along North French Rd at the eastern end of the site, and a right in-right out (RIRO) driveway along North French Rd at the western end of the site.

Study Area

To ensure a comprehensive analysis of potential traffic impacts, the following intersections define the study area:

- North French Road/I-990 SB Ramps
- North French Road/I-990 NB Ramps
- North French Road/Miller Road
- North French Road/Crosspoint Parkway

Existing and Background Conditions

Turning movement traffic counts were collected by Passero Associates on Wednesday, October 6th, 2021 at the North French Road/Crosspoint Pkwy intersection; Tuesday, July 26th, 2022, at the North French Rd/I-990 SB Ramps and North French Rd/I-990 NB Ramps intersections; and Tuesday, July 11th, 2023 at the North French Rd/Miller Rd intersection. Traffic counts were conducted between 7:00-9:00 AM for the weekday AM peak period and 4:00-6:00 PM for the weekday PM peak period. The peak hour traffic periods occurred from 7:45-8:45 AM and 4:30-5:30 PM.

Construction of the proposed project is anticipated to reach full build-out within approximately three years. Widely accepted methodology for preparing traffic impact studies requires that any projects in the study area that are currently approved and/or under construction must be considered in the traffic analysis. Projects that are contemplated but not yet approved are not included in a traffic analysis. Local municipal personnel were contacted to discuss any other specific projects that are currently approved or under construction that would generate additional traffic in the study area. Town of Amherst officials identified a residential project at 50 Crosspoint Pkwy and a residential development at 3325 & 3275 Millersport Hwy. Site trips generated for both projects were added to the study intersections.

A review of available historical NYSDOT traffic volume data in the vicinity of the site and data collected by Passero Associates at the study intersections indicates that traffic has increased by approximately 1.35% between 2011 and 2023 on the roadway segments in the study area. To account for normal increases in background traffic growth, and

any other unforeseen developments in the study area, a growth rate of 1.5% per year was applied to the existing traffic volumes for the four-year build out period from the existing analysis.

Conclusions and Recommendations

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed residential development located along North French Road in the Town of Amherst, NY. The results of this study determined that the existing transportation network can adequately accommodate the projected traffic volumes and resulting minor impacts to study area intersections with the noted mitigation in place. The following sets forth the conclusions and recommendations based upon the results of the analyses:

Conclusions

1. The proposed project is expected to generate approximately 22 entering/67 exiting vehicle trips during the AM peak hour and 64 entering/40 exiting vehicle trips during the PM peak hour.

2. The eastbound traffic volumes turning left into the proposed easterly driveway from North French Rd indicate that a left-turn lane is warranted during both peak hours.

3. The North French Rd/Proposed Easterly Driveway intersection is projected to operate at LOS "D" or better under full build conditions during both peak hours with the recommended mitigation.

4. The North French Rd/Miller Rd intersection is projected to operate at LOS "E" or better under full build conditions during both peak hours with the recommended mitigation.

5. The detailed analysis contained in this Traffic Impact Study demonstrates the proposed project will not result in any potentially significant adverse environmental impacts for the purpose of the environmental review of the project pursuant to the State Environmental Quality Review Act ("SEQRA").

Recommendations

6. The proposed westerly site driveway should be designed to prohibit left turns from entering and exiting the site and to accommodate the appropriate design vehicle.

7. An eastbound left turn lane is recommended on North French Rd at the proposed site driveway and a two-way left turn lane (TWLTL) should be provided between the site driveway and Miller Rd.

8. The proposed easterly driveway along North French Road should be designed to provide one entering and one exiting lane.

2.0 INTRODUCTION

2.1 Study Purpose and Objectives

The purpose of this report is to evaluate the potential traffic impacts related to the proposed residential development located along North French Road in the Town of Amherst, NY. Within this report, the operating characteristics of the proposed access points and impacts to the adjacent roadway network are evaluated and mitigating measures are identified (if needed) to minimize operational concerns.

To define traffic impact, this analysis establishes existing baseline traffic conditions, projects background traffic flow including area growth, and determines the traffic operations that would result from the proposed project.

2.2 Project Location

The project site is located along the north side of North French Road, between I-990 and Crosspoint Pkwy, in the Town of Amherst, Erie County, New York The project site is bounded by I-990 to the north and west, an office building and Crosspoint Pkwy to the east, and North French Rd to the south. Land uses in the vicinity of the proposed project include commercial and residential.

2.3 Study Area

To ensure a comprehensive analysis of potential traffic impacts, the following intersections define the study area:

- North French Road/I-990 SB Ramps
- North French Road/I-990 NB Ramps
- North French Road/Miller Road
- North French Road/Crosspoint Parkway

The project site location and study area are illustrated in **Figure 1** (all figures are included at the end of this report).

3.0 TRANSPORTATION SETTING

3.1 Description of Study Area Roadways

The information outlined in **Table 1** provides a description of the existing roadway network within the study area. **Figure 2** illustrates the lane geometry and traffic control at each of the study intersections and the Annual Average Daily Traffic (AADT) volumes on the study roadways. The AADTs reflect the most recently collected data obtained from the NYSDOT.

Table 1: *Existing Highway System*

ROADWAY	CLASS[1]	AGENCY[2]	SPEED LIMIT[3]	TRAVEL LANES[4]	ORIENTATION OF TRAVEL	AADT[5]
North French Road (CR-299)	14	ECDPW	45	4	Two-way/ East-West	23,654 NYSDOT (2019)
Miller Road	19	Town of Amherst	35	2	Two-way/ North-South	673 Passero (2023)
Crosspoint Parkway	19	Town of Amherst	30	2	Two-way/ North-South	4,811 Passero (2023)

Notes:
1. State functional classification of roadway
2. Jurisdictional agency of roadway.
3. Posted or statewide limit in miles per hour (mph).
4. Number of travel lanes. Excludes turning/auxiliary lanes developed at intersections.
5. Estimated AADT in vehicles per day (vpd). AADT source (Year).

The Highway Functional Classification System defines the role a roadway plays in the overall road network. Functional classification of highways within the study area is determined by the NYSDOT and the Federal Highway Administration (FHWA).

Class 14: Urban Principle Arterial

According to the FHWA, this class of roadways "serve major activity centers, highest traffic volume corridors and longest trip demands." They "carry high proportions of total urban travel on minimum of mileage," and "interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area." These roads "serve demand for intra-area travel between the central business district and outlying residential areas."

Class 19: Urban Local

According to the FHWA, this class of roadway includes all facilities not in one of the higher systems (e.g., arterial, collector, etc.). It primarily permits direct access to abutting lands and connections to the higher order systems and is not intended for use in long distance travel. As public roads, they should be accessible for public use throughout the year. Generally, the streets carry little to no through-traffic flows.

3.2 Description of Multimodal Network

Table 2 summarizes the traffic controls, pedestrian, bicycle, and transit accommodations within the study area.

Table 2: *Multimodal Network*

ROADWAY/ INTERSECTION	TRAFFIC CONTROL	PEDESTRIAN	BICYCLE	TRANSIT
North French Road/ I-990 SB Ramps	Signalized	There is a crosswalk across the southbound approach with a countdown signal. There is a sidewalk along the north side of North French Rd.	There are no bicycle facilities at this intersection, but cyclists are permitted to share the road on all approaches	Public transit service within the study area is provided by the Niagara Frontier Transportation Association (NFTA). There are no transit stops at this intersection.
North French Road/ I-990 NB Ramps	Signalized	There are crosswalks across the southbound and westbound approaches with countdown signals. There is a sidewalk along the north side of North French Rd and another sidewalk along the south side of North French Rd to the east of the I-990.	There are no bicycle facilities at this intersection, but cyclists are permitted to share the road on all approaches	Public transit service within the study area is provided by the Niagara Frontier Transportation Association (NFTA). There are no transit stops at this intersection.
North French Road/ Miller Road	Unsignalized	There are no crosswalks at this intersection. There is a sidewalk along both sides of North French Rd.	There are no bicycle facilities at this intersection, but cyclists are permitted to share the road on all approaches	Public transit service within the study area is provided by the Niagara Frontier Transportation Association (NFTA). There are no transit stops at this intersection.
North French Road/Crosspoint Pkwy	Signalized	There are crosswalks across the southbound and westbound approaches without countdown signals. There is a sidewalk along both sides of North French Rd and another sidewalk along the east side of Crosspoint Pkwy.	There are no bicycle facilities at this intersection, but cyclists are permitted to share the road on all approaches	Public transit service within the study area is provided by the Niagara Frontier Transportation Association (NFTA). There are no transit stops at this intersection, however, Bus Route 44 provides bus stops to the east of the intersection, near Millersport Hwy, and to the north next to the proposed driveway along Crosspoint Pkwy.

3.3 Planned/Programmed Highway Improvements

There are no planned highway improvement projects in the study area.

4.0 EXISTING CONDITIONS ANALYSIS

4.1 Peak Intervals for Analysis

Given the functional characteristics of the corridors, adjacent land uses, and the proposed land use for the project site, the peak hours selected for analysis are the weekday AM and PM peak periods. The combination of site traffic and adjacent street traffic produces the greatest demand during these time periods.

4.2 Existing Traffic Volume Data

Turning movement traffic counts were collected by Passero Associates on Wednesday, October 6th, 2021 at the North French Road/Crosspoint Pkwy intersection; Tuesday, July 26th, 2022, at the North French Rd/I-990 SB Ramps and North French Rd/I-990 NB Ramps intersections; and Tuesday, July 11th, 2023 at the North French Rd/Miller Rd intersection. Traffic counts were conducted between 7:00-9:00 AM for the weekday AM peak period and 4:00-6:00 PM for the weekday PM peak period. The peak hour traffic periods occurred from 7:45-8:45 AM and 4:30-5:30 PM. The existing peak hour traffic volumes are shown in **Figure 3A**.

All turning movement count data was collected on a typical weekday. No adverse weather conditions impacted the traffic counts. The traffic volumes were reviewed for seasonality and to confirm the accuracy and relative balance of the collective traffic counts. The actual differences in traffic volumes can be attributed to temporal variations in traffic volumes. Traffic volumes were adjusted where necessary to achieve an appropriate balance between intersections where no driveways are present. Additionally, the volumes collected at the North French Rd/I-990 SB Ramps, North French Rd/I-990 NB Ramps, and North French Road/Crosspoint Pkwy intersections were increased using the growth rate described in Section 5.0 to account for any growth in traffic between the time of data collection and 2023. **Figure 3B** illustrates the representative 2023 weekday AM and PM peak hour base volumes used for analysis purposes in this study.

4.3 Existing Crash Investigation

The purpose of this crash analysis is to identify inherent safety issues by studying and quantifying historical crashes at the study intersections and identifying potential crash patterns and clusters.

A crash cluster is defined as an abnormal occurrence of similar crash types occurring at approximately the same location or involving the same geometric features. The severity of the crashes should also be considered. A history of crashes is an indication that further analysis is required to determine the cause(s) of the crash(es) and to identify what actions, if any, could be taken to mitigate the crashes.

A crash investigation within the study area was conducted to assess the safety history from January 1, 2018, through December 31, 2022.

Reportable (non-injury, injury, and fatal injury) type crashes are defined as damage to one person's property in the amount of $1,001 or more. The Non-Reportable type crashes result in property damage of $1,000 or less. Crash rates were computed for the study intersections and compared with NYSDOT average crash rates for similar intersections, as summarized in **Table 3**. Intersection rates are listed as crashes per million entering vehicle (CR/MEV).

Table 3: *Intersection Crash Rate Analysis*

INTERSECTION	NUMBER OF CRASHES	NUMBER OF ENTERING VEHICLES	ACTUAL CRASH RATE	STATEWIDE AVERAGE CRASH RATE
North Forest Rd at I-990 SB Ramps	7	22,863 vpd	0.17	0.19
North Forest Rd at I-990 NB Ramps	14	25,221 vpd	0.30	0.32
North Forest Rd at Miller Rd	5	24,347 vpd	0.11	0.31
North Forest Rd at Crosspoint Pkwy	9	19,274 vpd	0.26	0.19

The North French Rd/I-990 SB Ramps, North French Rd/I-990 NB Ramps, and North French Rd/Miller Rd intersections have a crash rate that is lower than the statewide average crash rate for similar intersections. No discernible crash patterns exist; therefore, no geometric improvements are recommended.

North Forest Rd at Crosspoint Pkwy

The study intersection has a crash rate that is 1.36 times higher than the statewide average crash rate for similar intersections. Nine total crashes occurred in this intersection. Of the nine crashes, five (56%) were attributed to rear end collisions. The remaining crashes were right angle (1), right turn (1), and sideswipe (2). The only crash pattern identified was three westbound rear end crashes which were caused by driver inattention and following too closely. No other discernible crash patterns exist; therefore, no geometric improvements are recommended.

5.0 BACKGROUND (NO BUILD) CONDITIONS

Construction of the proposed project is anticipated to reach full build-out within approximately four years. Widely accepted methodology for preparing traffic impact studies requires that any projects in the study area that are currently approved and/or under construction must be considered in the traffic analysis. Projects that are contemplated but not yet approved are not included in a traffic analysis. Local municipal personnel were contacted to discuss any other specific projects that are currently approved or under construction that would generate additional traffic in the study area. Town of Amherst officials identified a residential project at 50 Crosspoint Pkwy and a residential development at 3325 & 3275 Millersport Hwy. Site trips generated for both projects were added to the study intersections.

A review of available historical NYSDOT traffic volume data in the vicinity of the site indicates that traffic has increased by approximately 1.35% between 2011 and 2023 on the roadway segments in the study area. To account for normal increases in background traffic growth, and any other unforeseen developments in the study area, a growth rate of 1.5% per year was applied to the existing traffic volumes for the four-year build out period from the existing analysis. The background traffic volumes are depicted in **Figure 4**.

6.0 PROPOSED DEVELOPMENT CONDITIONS

6.1 Project Description

The proposed project consists of 36 single family lots situated along a new private roadway, 17 townhome buildings containing a total of 69 units, and two two-story apartment buildings containing a total of 20 units. Access to the site will be provided via one full access driveway along North French Rd at the eastern end of the site, and a right in-right out (RIRO) driveway along North French Rd at the western end of the site. The Overall Site Plan is included at the end of this report.

6.2 Proposed Traffic Generation

The volume of traffic generated by a site is dependent on the intended land use and size of the development. Trip generation is an estimate of the number of trips generated by a specific building or land use. These trips represent the volume of traffic entering and exiting the development. *Trip Generation Manual* (11th Edition) published by the Institute of Transportation Engineers (ITE) is used as a reference for this information. The trip rate for the peak hour of the generator may or may not coincide in time or volume with the trip rate for the peak hour of adjacent street traffic. Volumes generated during the peak hour of the adjacent street traffic and proposed land uses, in this case, the weekday commuter AM and PM peak hours, represent a more critical volume when analyzing the capacity of the system; those intervals will provide the basis of this analysis. **Table 4** shows the estimated site generated trips that will be added to the existing roadway system under full project development.

Table 4: *Site Generated Trips*

DESCRIPTION	ITE LUC[1]	SIZE	AM PEAK HOUR		PM PEAK HOUR	
			ENTER	EXIT	ENTER	EXIT
Single-Family Detached Housing	210	36 units	7	22	24	14
Single-Family Attached Housing	215	69 units	8	23	22	15
Multifamily Housing (Low-Rise)	220	20 units	7	22	18	11
Total			**22**	**67**	**64**	**40**

Note:
1. LUC = Land Use Code.

The proposed project is expected to generate approximately 22 entering/67 exiting vehicle trips during the AM peak hour and 64 entering/40 exiting vehicle trips during the PM peak hour.

6.3 Trip Distribution

The cumulative effect of site-generated traffic on the transportation network is dependent on the origins and destinations of that traffic and the location of the access drives serving the site. The proposed arrival/departure distribution of traffic generated by the proposed project is considered a function of several parameters, including:

- Residential and Employment centers using U.S. Census Data
- Site layout and access locations
- Proximity and access to expressways (I-990) and other main roadways
- Existing traffic patterns
- Existing traffic conditions and controls

Figure 5 shows the anticipated trip distribution pattern percentage for the project site. **Figure 6** illustrates the peak hour project site-generated traffic based on those percentages.

6.4 Full Development Volumes

The proposed design hour traffic volumes are developed for the peak hours by combining the background traffic conditions (**Figure 4**) and the new site-generated traffic volumes (**Figure 6**) to yield the traffic volumes under full development conditions. **Figure 7** illustrates the total peak hour volumes anticipated for the proposed project under full build-out conditions.

7.0 TRAFFIC OPERATIONS AND ANALYSIS

7.1 Left-Turn Warrant Investigation

This study used the Transportation Research Board's (TRB) *NCHRP Report 279 Intersection Channelization Design Guide* to evaluate the volume warrants for a left-turn treatment at the proposed driveway locations. Provisions for left-turn lane facilities should be established where traffic volumes are high enough and safety considerations are sufficient to warrant the additional lane. This investigation analyzed warrants during the weekday AM and PM peak hours for the intersections under full development conditions.

The eastbound traffic volumes turning left into the proposed easterly driveway from North French Rd indicate that a left-turn treatment is warranted during both peak hours. It is recommended that an eastbound left turn lane is installed at the proposed driveway location. Additionally, a two-way left turn lane (TWLTL) should be provided via restriping the existing pavement markings to the east of the intersection between the proposed easterly driveway and Miller Rd. A concept plan of showing this mitigation can be found at the end of the report.

7.2 Description of Capacity Analysis

Capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. The measure of effectiveness used for the capacity analysis is referred to as a Level of Service (LOS). Levels of service are calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since the most amount of delay to motorists usually occurs at intersections, capacity analysis focuses on intersections, as opposed to highway segments.

The standard procedure for capacity analysis of signalized and unsignalized intersections is outlined in the *Highway Capacity Manual* (HCM) *7th Edition* published by the Transportation Research Board (TRB). Traffic analysis software, Synchro 12, which is based on procedures and methodologies contained in the HCM, was used to analyze operating conditions at study area intersections. The procedure yields a level of service based on the HCM as an indicator of how well intersections operate.

Six levels of service are defined for analysis purposes. They are assigned letter designations, from "A" to "F", with LOS "A" representing the conditions with little to no delay, and LOS "F" conditions with very long delays. Suggested ranges of service capacity and an explanation of levels of service are included in the Appendices. LOS "C" or better is desirable, but LOS "D" for signalized locations and LOS "E" for unsignalized locations are generally thresholds of acceptable operation during peak periods so long as the volume to capacity ratio (v/c) is below 1.0. **Table 5** depicts level of service criteria for both signalized and unsignalized intersections.

Table 5: *Level of Service Criteria*

LEVEL OF SERVICE	SIGNALIZED CONTROL DELAY PER VEHICLE (seconds)	STOP CONTROL DELAY PER VEHICLE (seconds)
A	< 10	< 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

LOS for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15-minute analysis period. LOS for unsignalized intersections, however, are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals.

The v/c ratio, also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur.

7.3 Capacity Analysis Results

Existing and background operating conditions during the peak study periods are evaluated to determine a basis for comparison with the projected future conditions. The future traffic conditions generated by the project were analyzed to assess the operation of the study area intersections. Capacity results for existing, background, and the three full development access conditions are listed in **Table 6**. The discussion following the table summarizes capacity conditions. The detailed Synchro capacity analysis worksheets are contained in the Appendices.

TABLE 6: CAPACITY ANALYSIS RESULTS

INTERSECTION	2023 EXISTING BASE CONDITIONS				2027 BACKGROUND CONDITIONS				2027 FULL BUILD CONDITIONS				2027 FULL BUILD CONDITIONS WITH MITIGATION			
	AM		PM		AM		PM		AM		PM		AM		PM	
1. North French Road/I-990 SB Ramps (S)																
EB Thru - North French Road	B	10.8	B	10.9	B	11.2	B	11.1	B	11.3	B	11.2	N/A		B	11.2
EB Right - North French Road	A	4.7	A	1.6	A	5.8	A	1.9	A	6.0	A	1.7			A	1.7
WB Left - North French Road	D	47.9	E	61.5	D	49.0	E	75.1	D	49.5	E	70.3			E	70.0
WB Thru - North French Road	A	4.7	A	7.9	A	4.7	A	9.3	A	4.8	B	13.0			B	13.0
SB - I-990 SB Ramps	A	2.4	A	2.2	A	2.7	A	2.4	A	2.7	A	2.4			A	2.4
Overall LOS	**B**	**15.4**	**C**	**21.3**	**B**	**16.2**	**C**	**25.3**	**B**	**16.5**	**C**	**25.6**			**C**	**25.5**
Volume-to-Capacity (v/c) Ratio	**0.59**		**0.88**		**0.65**		**0.94**		**0.66**		**0.93**				**0.93**	
2. North French Road/I-990 NB Ramps (S)																
EB Left/Thru - North French Road	B	13.4	B	14.1	B	14.2	B	14.9	B	14.4	B	16.0	N/A		B	16.9
WB Thru/Right - North French Road	B	13.4	C	20.1	B	14.6	C	21.1	B	15.1	C	21.6			C	22.3
NB Left - I-990 NB Ramps	D	48.4	E	62.9	D	49.7	E	65.9	D	50.0	F	80.5			E	76.5
NB Thru - I-990 NB Ramps	B	13.7	A	7.1	C	20.3	A	9.5	C	21.4	B	11.4			B	11.5
NB Right - I-990 NB Ramps	B	13.5	A	7.0	C	20.1	A	9.4	C	21.2	B	11.3			B	11.4
Overall LOS	**B**	**16.0**	**C**	**21.6**	**B**	**18.7**	**C**	**22.8**	**B**	**19.2**	**C**	**25.3**			**C**	**25.3**
Volume-to-Capacity (v/c) Ratio	**0.59**		**0.88**		**0.65**		**0.94**		**0.66**		**0.93**				**0.93**	
3. North French Road/ Proposed Westerly Driveway (U)																
SB - Proposed Driveway	N/A		N/A		N/A		N/A		B	11.7	C	15.2	N/A		N/A	
4. North French Road/Proposed Easterly Driveway (U)																
EB Left - North French Road	N/A		N/A		N/A		N/A		A	9.7	B	13.5	A	9.7	B	13.5
SB - Proposed Driveway									E	48.6	F	141.1	C	20.4	D	32.0
5. North French Road/Miller Road (U)																
WB Left - North French Road	B	12.6	B	10.9	B	13.3	B	11.5	B	13.5	B	12.2	B	13.5	B	12.2
NB - Miller Road	F	71.3	F	60.2	F	101.6	F	82.6	F	109.1	F	131.4	E	36.6	D	31.6
6. North French Road/Crosspoint Pkwy (S)																
EB Left - North French Road	C	21.2	C	24.5	C	23.3	C	27.3	C	23.5	C	32.1	N/A		N/A	
EB Thru - North French Road	A	4.8	A	6.5	A	5.3	A	6.9	A	5.4	A	6.9				
WB Thru - North French Road	B	17.2	B	15.3	B	18.8	B	16.3	B	18.8	B	17.7				
WB Right - North French Road	A	4.5	A	5.5	A	5.2	A	5.7	A	5.2	A	5.9				
SB Left - Crosspoint Pkwy	C	25.6	C	25.2	C	27.9	C	28.0	C	28.0	C	34.4				
SB Right - Crosspoint Pkwy	A	9.2	A	5.8	A	7.9	A	5.7	A	7.9	A	6.5				
Overall LOS	**B**	**11.7**	**B**	**11.1**	**B**	**13.0**	**B**	**12.0**	**B**	**13.0**	**B**	**13.1**				
Volume-to-Capacity (v/c) Ratio	**0.60**		**0.66**		**0.65**		**0.68**		**0.65**		**0.73**					

1. North French Road/I-990 SB Ramps (Signalized)

All approaches operate at LOS "D" or better under existing and background conditions during both peak hours with the exception of the westbound left approach which operates at a LOS "E" during the PM peak hour. In between background and full build conditions, the westbound thru approach is projected to change from LOS "A" to "B" during the PM peak hour period, however, this is considered a borderline condition as the threshold between LOS "A" and "B" is 10.0 seconds per vehicle and the actual increase in delay projected is 3.7 seconds per vehicle. No other changes in LOS are anticipated and no other mitigation is warranted or recommended as a result of the project at this intersection.

2. North French Road/I-990 NB Ramps (Signalized)

All approaches operate at LOS "D" or better under existing and background conditions during both peak hours with the exception of the northbound left approach which operates at a LOS "E" during the PM peak hour. In between background and full build conditions, the northbound thru and northbound right approaches are projected to change from LOS "A" to "B" during the PM peak hour period, however, these are considered a borderline condition as the threshold between LOS "A" and "B" is 10.0 seconds per vehicle and the actual increase in delay projected is 0.9 seconds for both the northbound thru and northbound right approaches. Also between background and full build conditions, the northbound left is projected to change from LOS "E" to LOS "F". This change in LOS can be mitigated through minor adjustments to the signal timings (less than two seconds). The traffic signal is fully actuated and will automatically adjust to the increased traffic without any changes to the controller settings. No other changes in level of service are anticipated, and no improvements are warranted nor recommended at this location.

3. North French Road/Proposed Westerly Driveway (Unsignalized)

All approaches operate at LOS "C" or better under full build conditions during both peak hours. No improvements are warranted nor recommended at this location. The driveway should be designed to prohibit left turns from entering and exiting the site and to accommodate the appropriate design vehicle.

4. North French Road/Proposed Easterly Driveway (Unsignalized)

All approaches operate at LOS "B" or better under full build conditions during both peak hours with the exception of the southbound approach which operates at a LOS "E" and LOS "F" during the AM and PM peak hour periods, respectively. An eastbound left turn lane is warranted based on the analysis contained in Section 7.1. An eastbound left turn lane is recommended on North French Rd at the proposed site driveway and a two-way left turn lane (TWLTL) should be provided between the site driveway and Miller Rd. Under the mitigated conditions, the southbound approach is projected to operate at LOS "C" and LOS "D" with moderate delays during the AM and PM peak hour periods, respectively. The proposed driveway should consist of one entering and one exiting lane.

5. North French Road/Miller Road (Unsignalized)

All approaches operate at LOS "B" under all conditions during both peak hours with the exception of the northbound approach which operates at a LOS "F" during both peak hours. No changes in level of service are anticipated. A TWLTL will be installed between the proposed site driveway and Miller Rd as mitigation for this project. Northbound left turns can utilize the TWLTL to cross the eastbound lanes before merging with the westbound traffic. Under the mitigated conditions, the northbound approach is projected to operate at a LOS "E" and LOS "D" during the AM and PM peak hour periods, respectively.

6. North French Road/Crosspoint Parkway (Signalized)

All approaches operate at LOS "C" or better under all conditions during both peak hours. No changes in level of service are anticipated, and no improvements are warranted nor recommended at this location.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed residential development located along North French Road in the Town of Amherst, NY. The results of this study determined that the existing transportation network can adequately accommodate the projected traffic volumes and resulting minor impacts to study area intersections with the noted mitigation in place. The following sets forth the conclusions and recommendations based upon the results of the analyses:

Conclusions

1. The proposed project is expected to generate approximately 22 entering/67 exiting vehicle trips during the AM peak hour and 64 entering/40 exiting vehicle trips during the PM peak hour.

2. The eastbound traffic volumes turning left into the proposed easterly driveway from North French Rd indicate that a left-turn lane is warranted during both peak hours.

3. The North French Rd/Proposed Easterly Driveway intersection is projected to operate at LOS "D" or better under full build conditions during both peak hours with the recommended mitigation.

4. The North French Rd/Miller Rd intersection is projected to operate at LOS "E" or better under full build conditions during both peak hours with the recommended mitigation.

5. The detailed analysis contained in this Traffic Impact Study demonstrates the proposed project will not result in any potentially significant adverse environmental impacts for the purpose of the environmental review of the project pursuant to the State Environmental Quality Review Act ("SEQRA").

Recommendations

6. The proposed westerly site driveway should be designed to prohibit left turns from entering and exiting the site and to accommodate the appropriate design vehicle.

7. An eastbound left turn lane is recommended on North French Rd at the proposed site driveway and a two-way left turn lane (TWLTL) should be provided between the site driveway and Miller Rd.

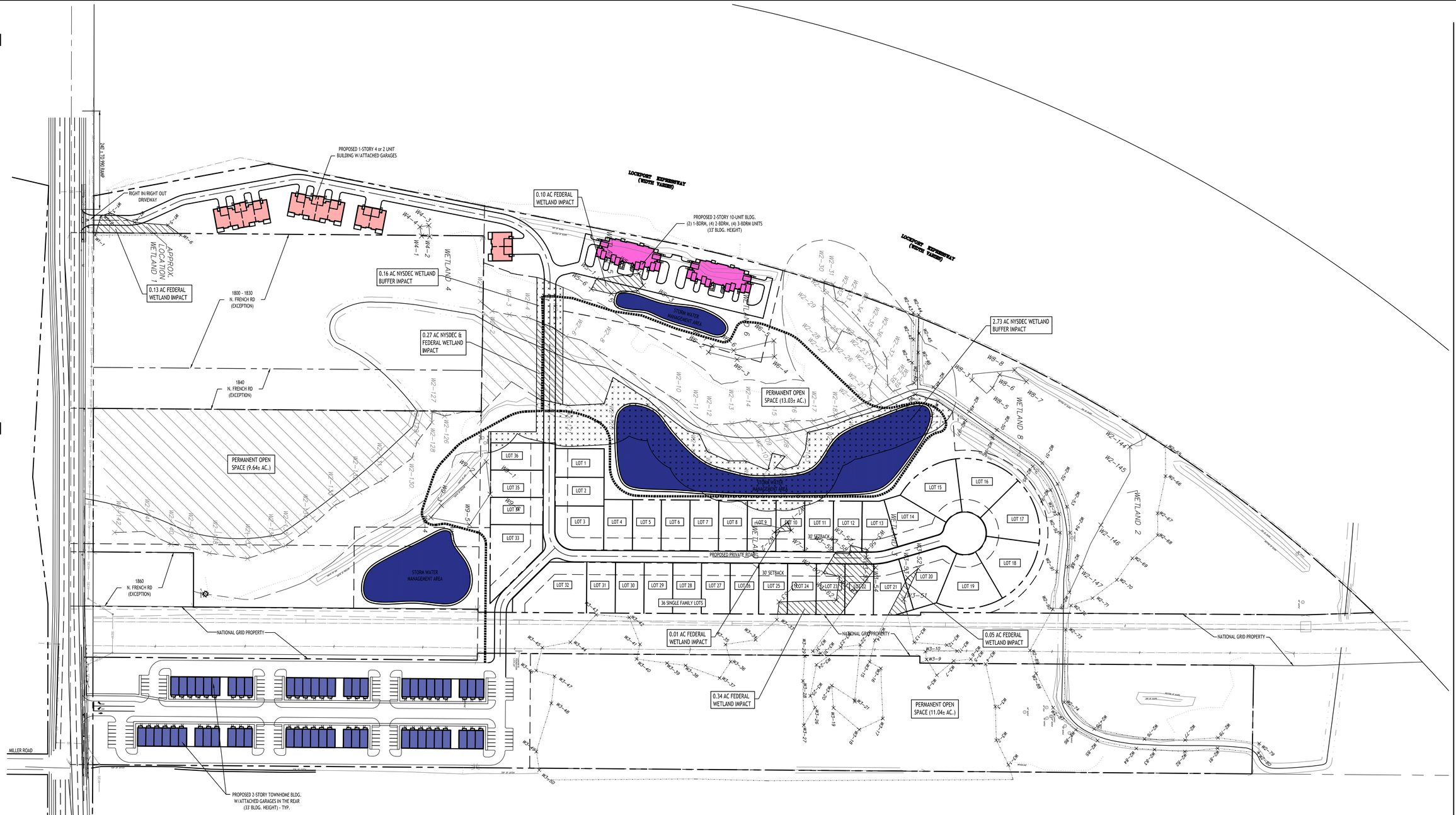
8. The proposed easterly driveway along North French Road should be designed to provide one entering and one exiting lane.

9.0 REFERENCES

- Synchro 12 Software. Cubic ITS.
- Highway Capacity Manual (HCM 7th TWSC). Transportation Research Board (TRB). Washington, DC. 2016.
- Highway Functional Classification Concepts, Criteria, and Procedures. FHWA. 2013.
- Trip Generation (11th Edition). Institute of Transportation Engineers (ITE). Washington, DC. 2021.
- OnTheMap. US Census Bureau. 2023.
- Traffic Data Viewer. New York State Department of Transportation (NYSDOT). 2023.

10.0 FIGURES

Figures 1 through 7 are included on the following pages.



RESIDENTIAL USE SUMMARY

4-UNIT or 2-UNIT, 1-STORY BLDGS = 12

10-UNIT, 2-STORY BLDGS = 20

3-6-UNIT, 2-STORY TOWNHOME BLDGS = 57

TOTAL RESIDENTIAL UNITS = 89

PROPOSED WALKING/JOGGING TRAILS

SITE DATA (SA TO BE REZONED R-3)
36 SINGLE FAMILY LOTS (27.46± AC.)

MIN. LOT WIDTH = 65 FT INTERIOR LOTS
MIN. LOT WIDTH = 75 FT CORNER LOTS

MIN. LOT AREA = 8,450 SF INTERIOR LOTS
MIN. LOT AREA = 9,750 SF CORNER LOTS

FRONT SETBACK = 30 FT
SIDE SETBACK = 5 FT
REAR SETBACK = 30 FT

MAXIMUM LOT COVERAGE = 35%
MAXIMUM BUILDING HEIGHT = 35 FT

MINIMUM FLOOR AREA = 1,000 SF (1 STORY)
MINIMUM FLOOR AREA = 1,200 SF (2 STORIES)

SITE DATA (SA TO BE REZONED MFR-5)
TOWNHOMES (6.34± AC.)

UNIT BREAKDOWN

2 - BDRM UNITS = 57

DENSITY CALCULATION

REQ'D LAND AREA

2 - BDRM: 57 x 4356 SF = 248,292 SF

248,292 SF = 5.70 ACRES REQD

PARKING CALCULATION

REQ'D = 2 SPACES PER UNIT
REQ'D = 57 UNITS x 2 = 114 SPACES REQD

PROVIDED = 269 SPACES W/ GARAGES

SITE DATA (SA TO BE REZONED MFR-5)
MULTIFAMILY (17.05± AC.)

UNIT BREAKDOWN

1 - BDRM UNITS = 4
2 - BDRM UNITS = 20
3 - BDRM UNITS = 8

TOTAL = 32 UNITS

DENSITY CALCULATION

REQ'D LAND AREA

1 - BDRM: 4 x 3630 SF = 14,520 SF
2 - BDRM: 20 x 4356 SF = 87,120 SF
3 - BDRM: 8 x 5445 SF = 43,560 SF

TOTAL = 145,200 SF = 3.33 ACRES REQD

PARKING CALCULATION

REQ'D = 2 SPACES PER UNIT
REQ'D = 32 UNITS x 2 = 64 SPACES REQD

PROVIDED = 64 SPACES W/ GARAGES

WETLAND IMPACTS

NYSDEC WETLAND IMPACTS = 0.27 AC

NYSDEC WETLAND BUFFER IMPACTS = 2.89 AC

FEDERAL WETLAND IMPACTS = 0.90 AC

TOTAL PERMANENT OPEN SPACE = 33.71± AC.

CONCEPT SITE PLAN

SCALE: 1"=110'

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD DESIGN ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

110' 110 0 110 220Ft.

CARMINAWOOD
DESIGN
Buffalo | Utica | Greensboro

Mixed Use Development

1790, 1860 & 1920 North French Road & Portion of 999 Campbell Blvd.
Amherst, New York
SBL No. 27.04-1-12, 16.1 & 20, 27.00-2-29

REVISIONS:

No.	Description	Date
1	Revised title block address	4/3/24
2	Added Federal wetlands	6/3/24
3	Updated Federal wetlands	6/7/24
4	Updated per Owner Comments	6/13/24
5	Updated per wetland delineation	8/19/24

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWING NAME:
Concept Site Plan

Date: 7/16/24
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.
C-100

Project No: 23-4131

Figure 1

PASSERO
engineering architecture

North French Rd Residential Development| Town of Amherst, Erie County, NY

0 400 800 1,600 Feet N

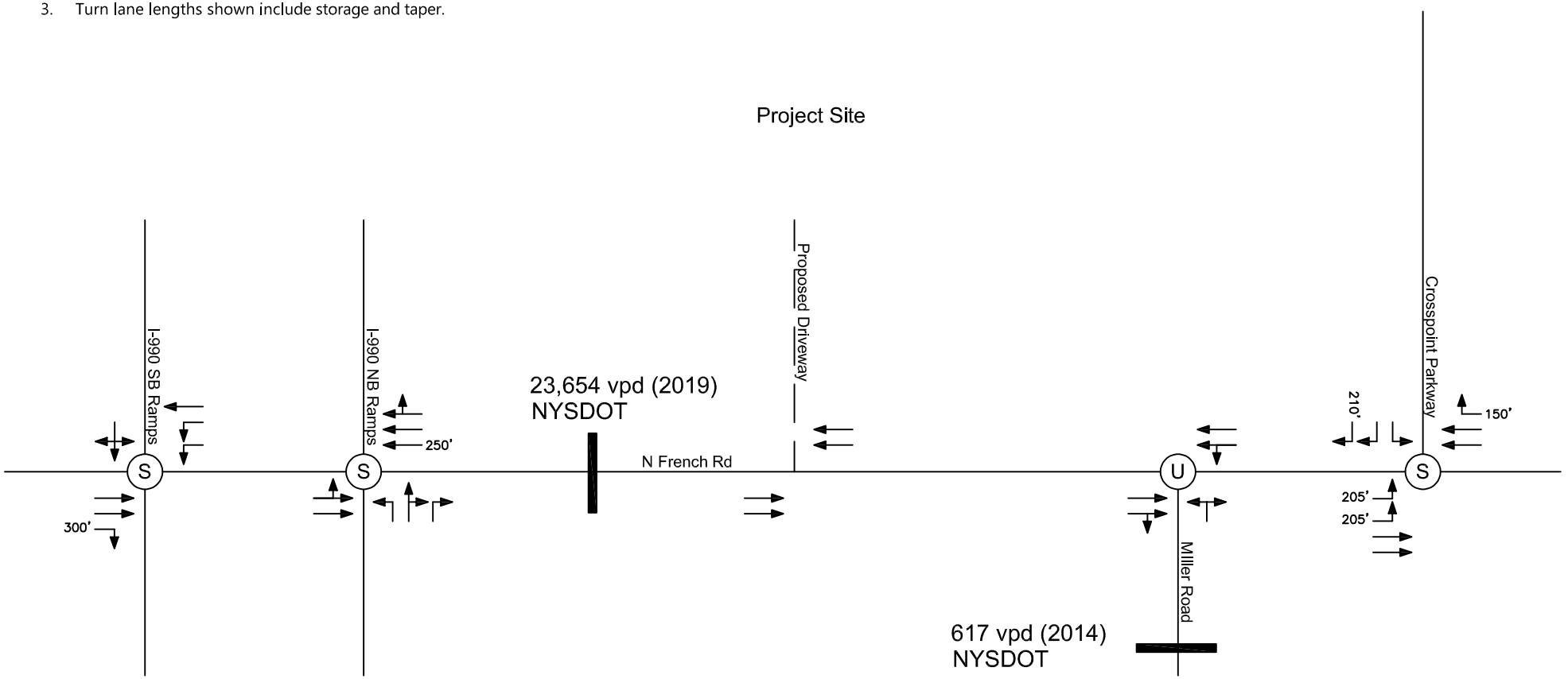
Site Location and Study Area

Key:
- # Study Intersection
- # Proposed Intersection
- Study Area

Project Number: 20233626.0005

Figure 2

Notes:
1. All AADT volumes by those noted:
   1.1. NYSDOT = New York State Department of Transportation.
   1.2. PA = Passero Associates.
2. vpd = Vehicles per day.
3. Turn lane lengths shown include storage and taper.



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

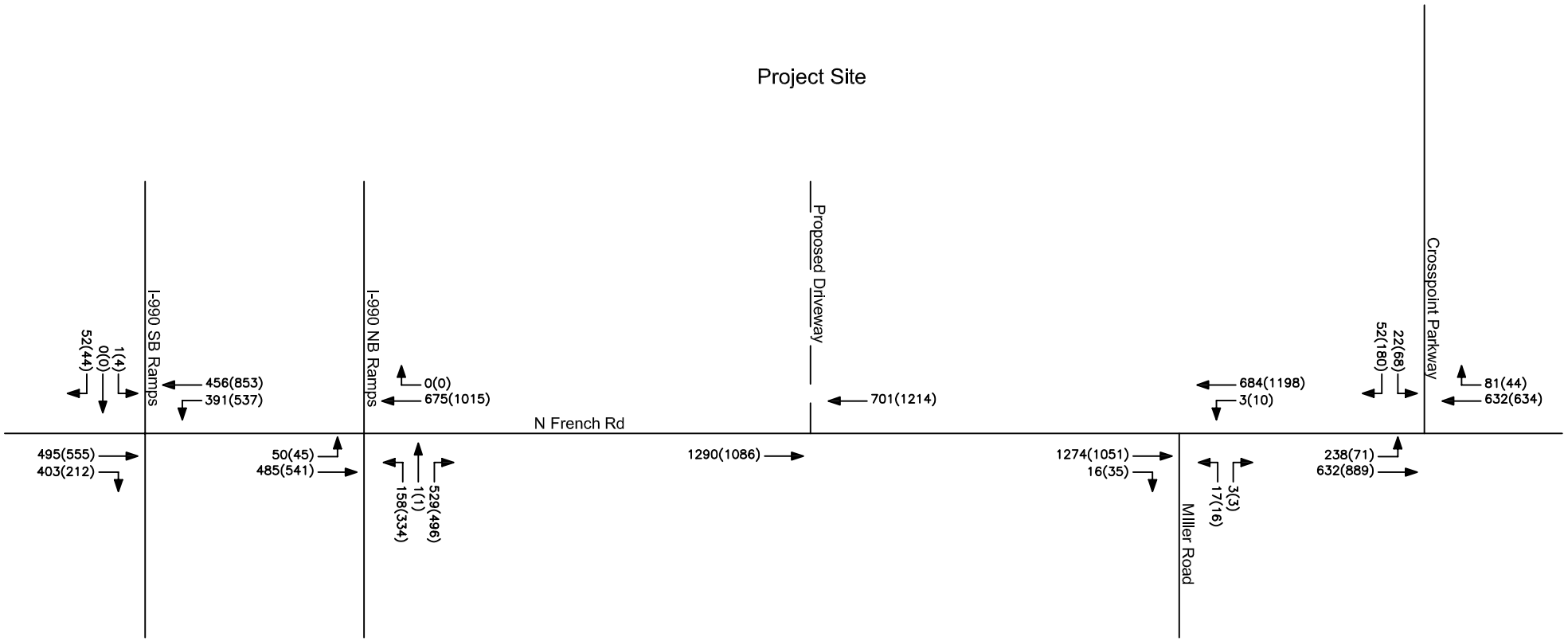
Lane Geometry and Average Daily Traffic

KEY:
00(00) = AM(PM)
– – – Proposed Access
U = Unsignalized
S = Signalized

Project Number: 20233626.0005

Figure 3A

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

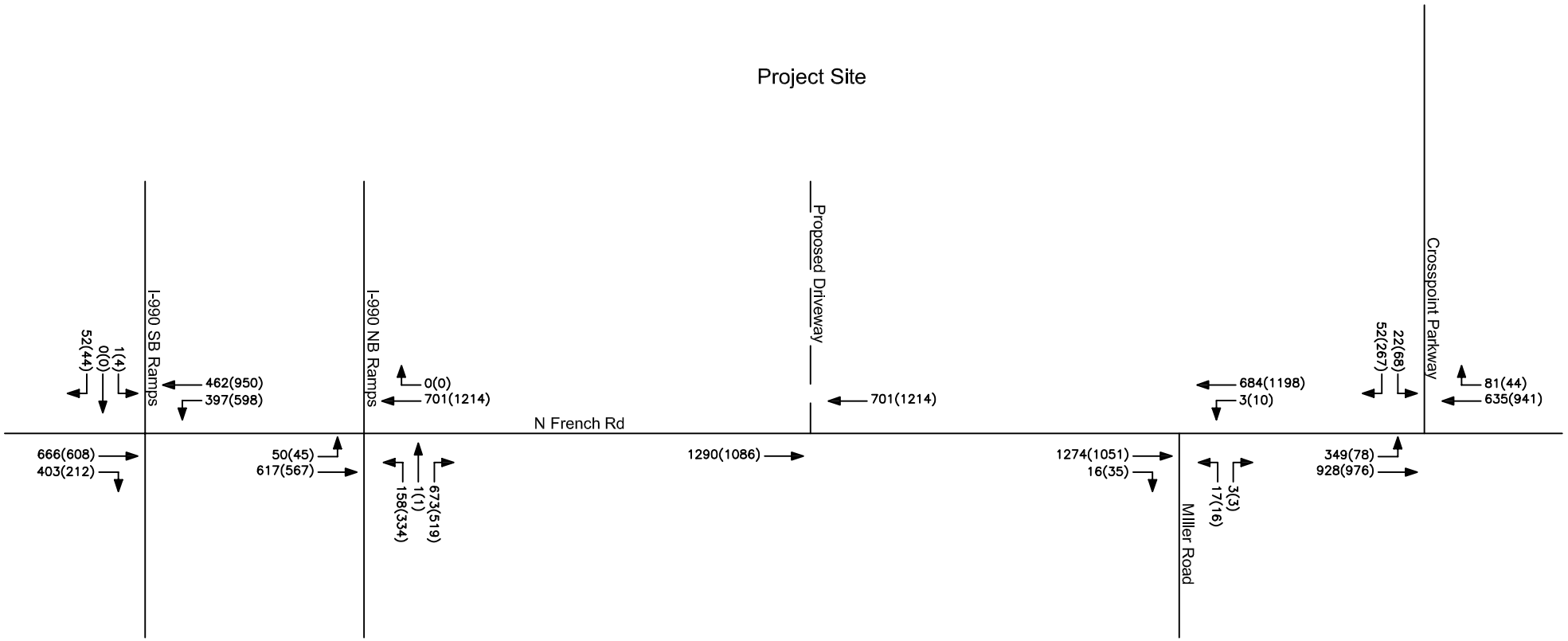
Peak Hour Volumes
2023 Existing Conditions

KEY:
00(00) = AM(PM)
– – – Proposed Access

Project Number: 20233626.0005

Figure 3B

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

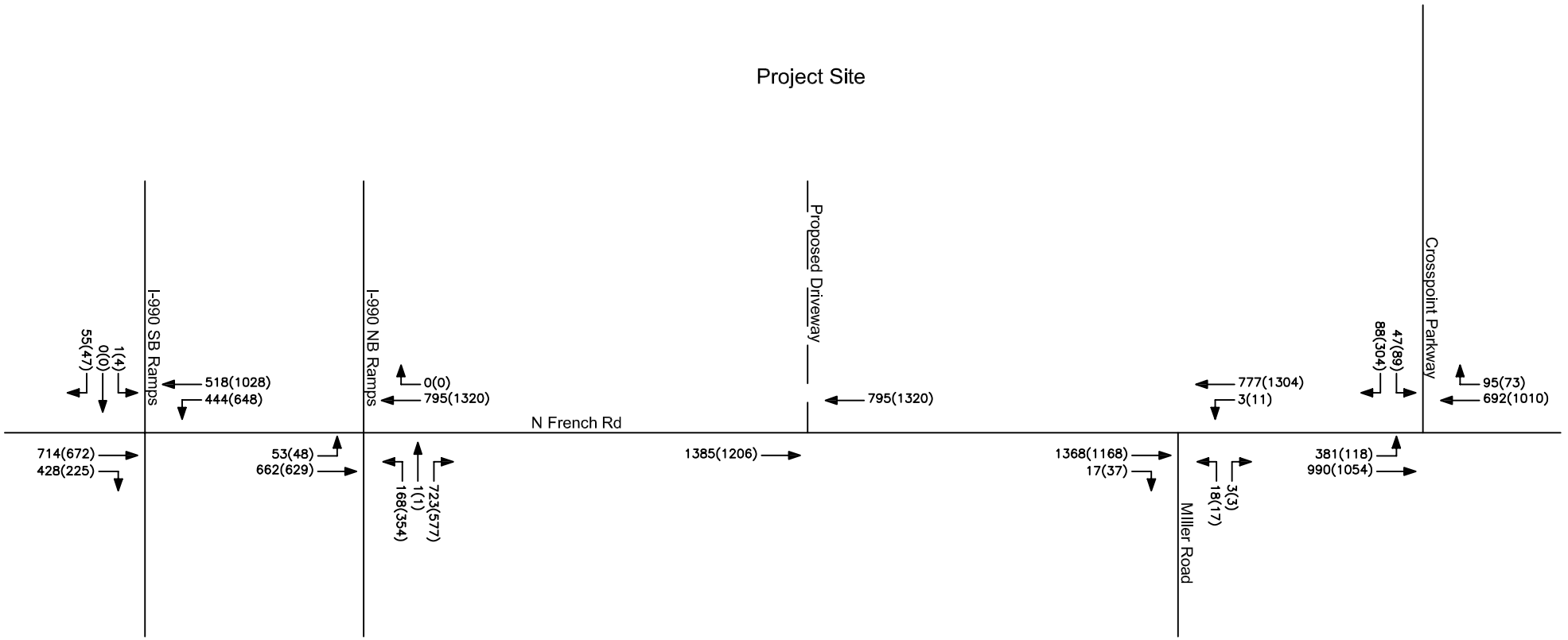
Peak Hour Volumes
2023 Balanced Existing Conditions

KEY:
00(00) = AM(PM)
– – – Proposed Access

Project Number: 20233626.0005

Figure 4

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

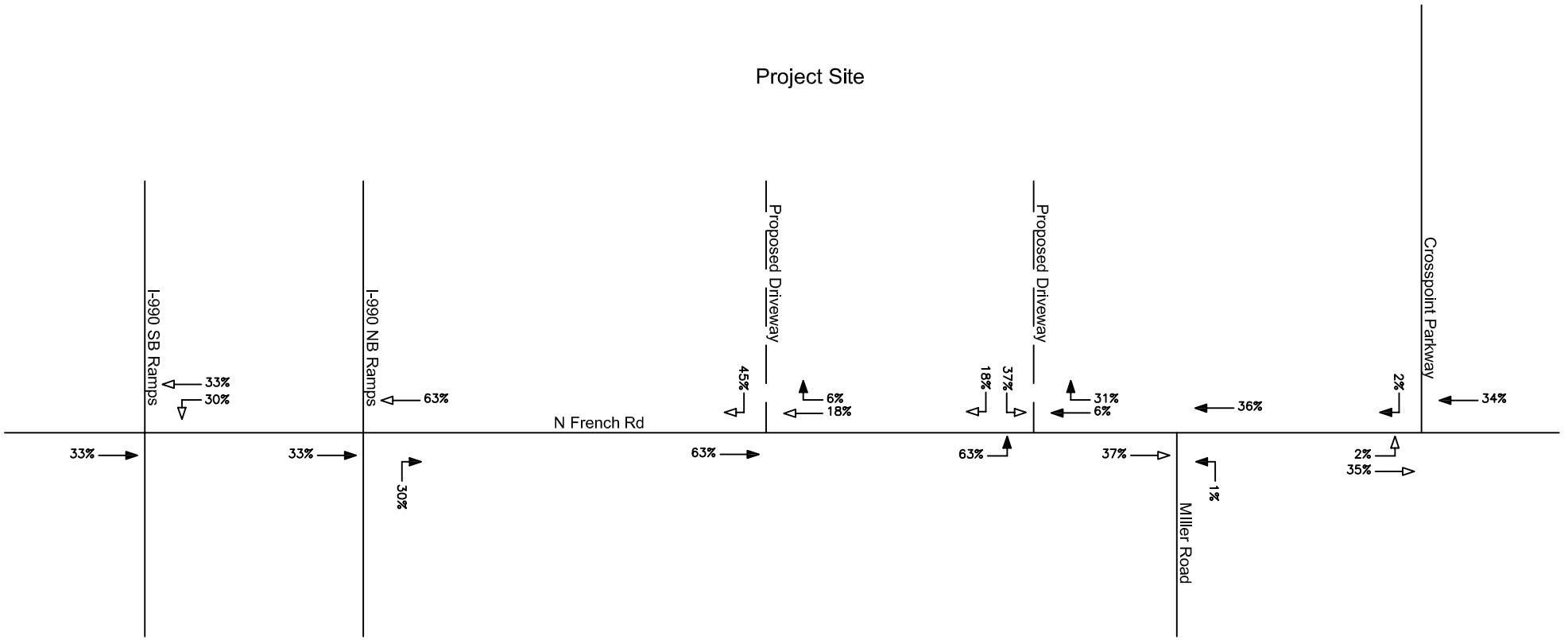
Peak Hour Volumes
2027 Background Conditions

KEY:
00(00) = AM(PM)
– – – Proposed Access

Project Number: 20233626.0005

Figure 5

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

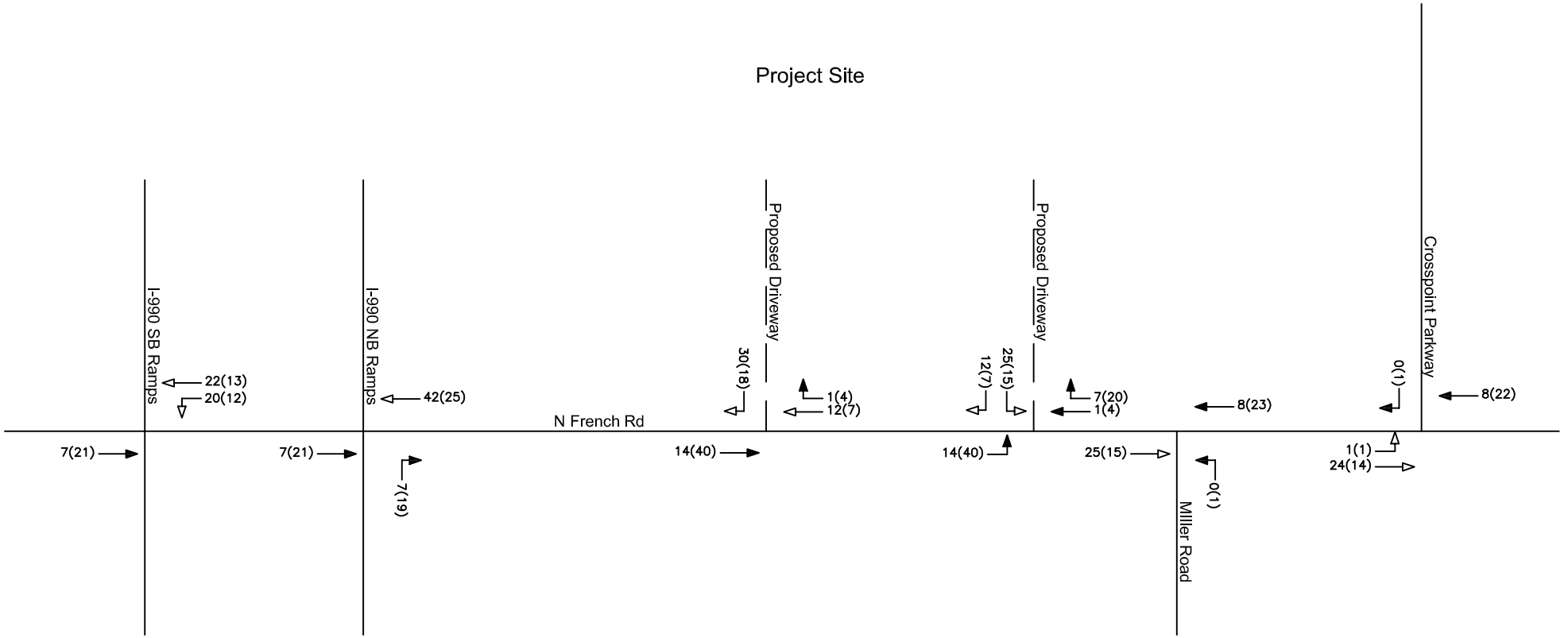
Trip Distribution

KEY:
00(00) = AM(PM)
Entering Trip
Exiting Trip
Proposed Access

Project Number: 20233626.0005

Figure 6

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

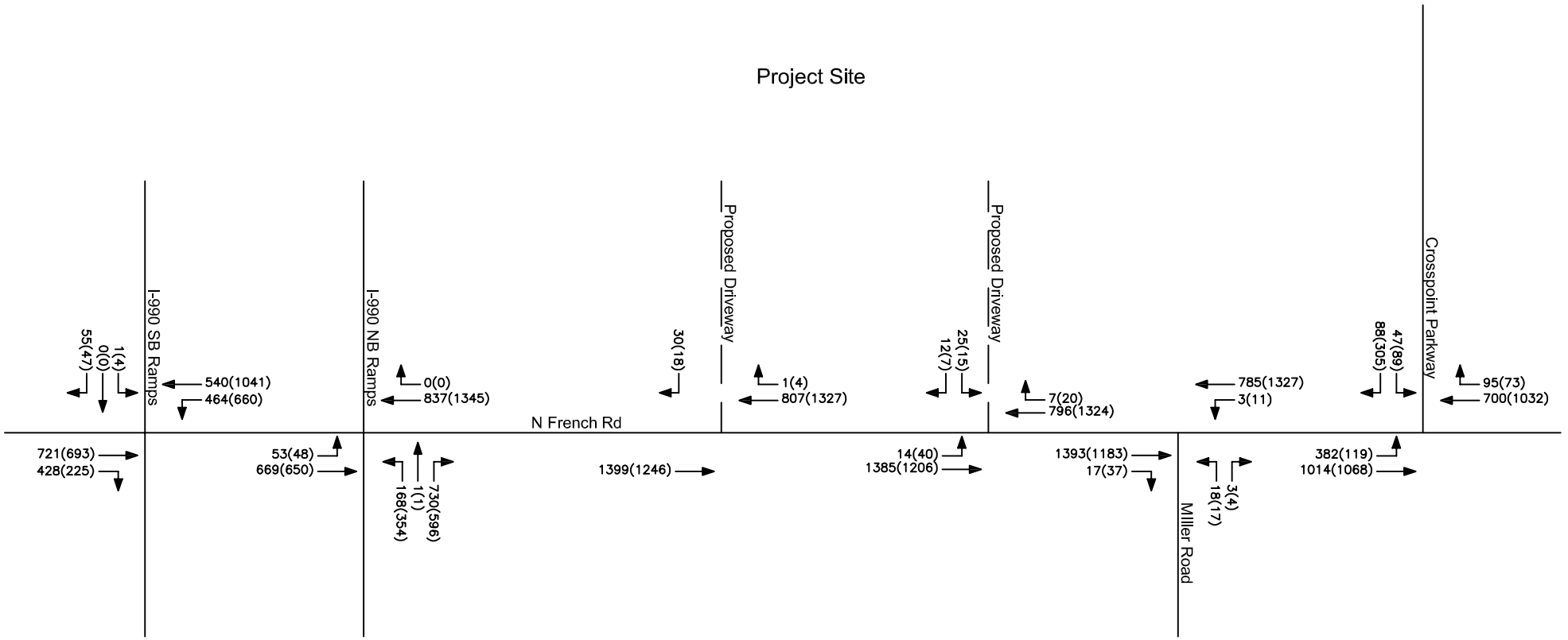
Site Generated Trips

KEY:
00(00) = AM(PM)
Entering Trip
Exiting Trip
Proposed Access

Project Number: 20233626.0005

Figure 7

PASSERO
engineering architecture



N French Road Residential Development| Town of Amherst, NY

N
NOT TO SCALE

Peak Hour Volumes
Full Development Conditions

KEY:
00(00) = AM(PM)
– – – Proposed Access

Project Number: 20233626.0005

PASSERO
engineering architecture

North French Rd Residential Development| Town of Amherst, Erie County, NY

0 50 100 200 Feet N

Left Turn Lane Concept

Project Number: 20233626.0005

APPENDICES

APPENDIX A: EXISTING TRAFFIC COUNT DATA

I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg / Direction	I990 NB Ramps Southbound						French Rd Westbound					
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*
2022-07-26 7:00AM	0	0	0	0	**0**	0	0	120	0	0	**120**	0
7:15AM	0	0	0	0	**0**	0	0	134	0	0	**134**	0
7:30AM	0	0	0	0	**0**	0	0	158	0	0	**158**	0
7:45AM	0	0	0	0	**0**	0	0	176	0	0	**176**	0
Hourly Total	0	0	0	0	**0**	0	0	588	0	0	**588**	0
8:00AM	0	0	0	0	**0**	0	0	166	0	0	**166**	0
8:15AM	0	0	0	0	**0**	0	0	164	0	0	**164**	0
8:30AM	0	0	0	0	**0**	1	0	159	0	0	**159**	0
8:45AM	0	0	0	0	**0**	0	0	144	0	0	**144**	0
Hourly Total	0	0	0	0	**0**	1	0	633	0	0	**633**	0
9:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0
4:00PM	0	0	0	0	**0**	0	0	206	0	0	**206**	0
4:15PM	0	0	0	0	**0**	0	0	199	0	0	**199**	0
4:30PM	0	0	0	0	**0**	0	0	260	0	0	**260**	0
4:45PM	0	0	0	0	**0**	0	0	195	0	0	**195**	0
Hourly Total	0	0	0	0	**0**	0	0	860	0	0	**860**	0
5:00PM	0	0	0	0	**0**	0	0	325	0	0	**325**	0
5:15PM	0	0	0	0	**0**	0	0	220	0	0	**220**	0
5:30PM	0	0	0	0	**0**	0	0	226	0	0	**226**	0
5:45PM	0	0	0	0	**0**	0	0	173	0	0	**173**	0
Hourly Total	0	0	0	0	**0**	0	0	944	0	0	**944**	0
Total	0	0	0	0	**0**	1	0	3025	0	0	**3025**	0
% Approach	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-
% Total	0%	0%	0%	0%	**0%**	-	0%	38.5%	0%	0%	**38.5%**	-
Motorcycles	0	0	0	0	**0**	-	0	4	0	0	**4**	-
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-
Lights	0	0	0	0	**0**	-	0	2949	0	0	**2949**	-
% Lights	0%	0%	0%	0%	**-**	-	0%	97.5%	0%	0%	**97.5%**	-
Heavy	0	0	0	0	**0**	-	0	72	0	0	**72**	-
% Heavy	0%	0%	0%	0%	**-**	-	0%	2.4%	0%	0%	**2.4%**	-
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

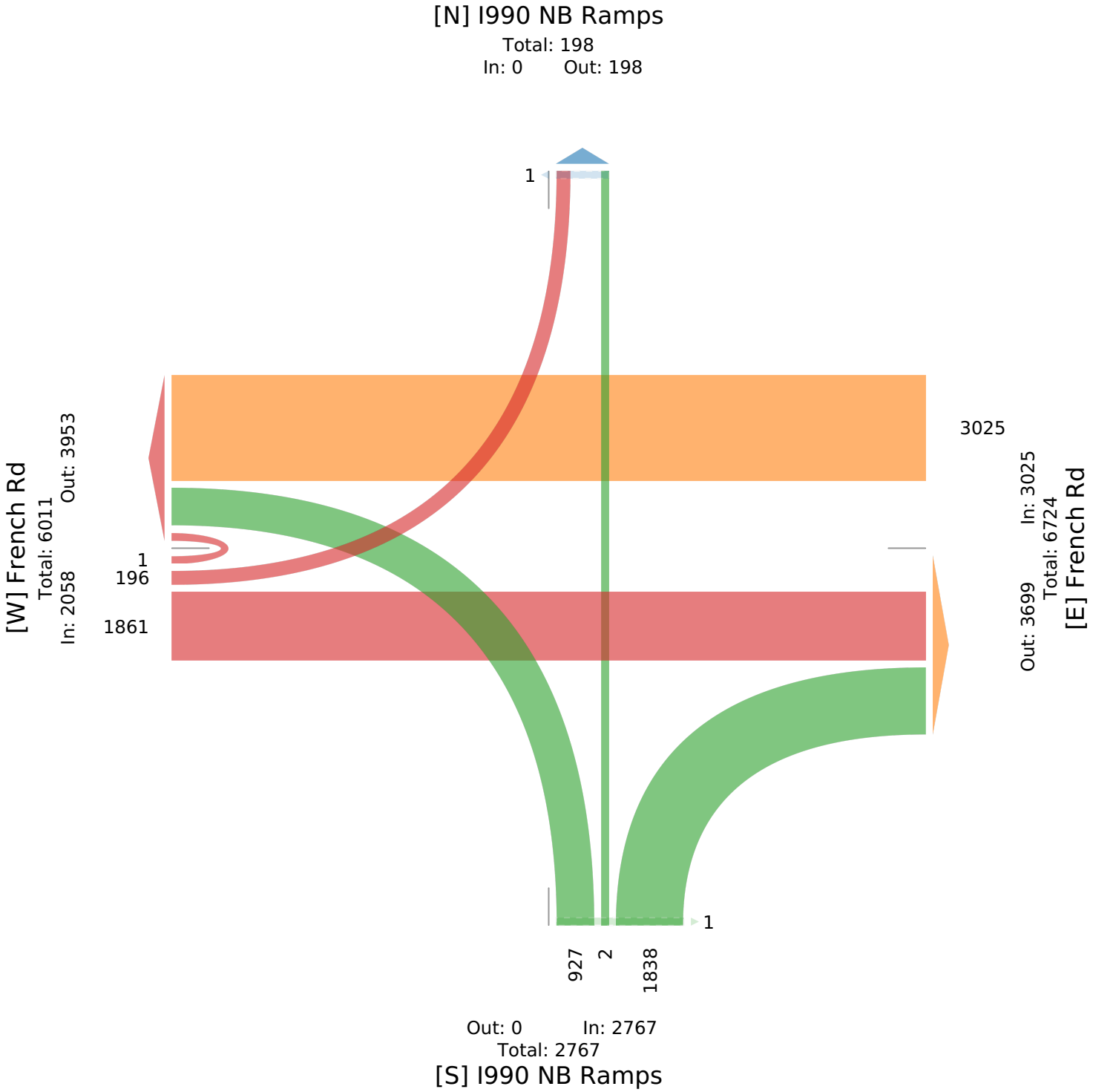
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg / Direction	I990 NB Ramps Northbound							French Rd Eastbound							
Time	R	T	L	U	RR	App	Ped*	R	T	L	U	RR	App	Ped*	Int
2022-07-26 7:00AM	13	0	27	0	40	**80**	0	0	62	8	0	0	**70**	0	**270**
7:15AM	66	0	38	0	46	**150**	0	0	97	18	0	0	**115**	0	**399**
7:30AM	60	0	30	0	60	**150**	0	0	97	10	0	0	**107**	0	**415**
7:45AM	115	0	41	0	50	**206**	0	0	110	8	0	0	**118**	0	**500**
Hourly Total	254	0	136	0	196	**586**	0	0	366	44	0	0	**410**	0	**1584**
8:00AM	58	0	42	0	49	**149**	1	0	105	7	0	0	**112**	0	**427**
8:15AM	95	0	43	0	45	**183**	0	0	133	17	0	0	**150**	0	**497**
8:30AM	58	1	30	0	51	**140**	0	0	130	17	0	0	**147**	0	**446**
8:45AM	70	0	39	0	38	**147**	0	0	131	12	0	0	**143**	0	**434**
Hourly Total	281	1	154	0	183	**619**	1	0	499	53	0	0	**552**	0	**1804**
9:00AM	0	0	0	0	0	**0**	0	0	1	0	0	0	**1**	0	**1**
Hourly Total	0	0	0	0	0	**0**	0	0	1	0	0	0	**1**	0	**1**
4:00PM	47	0	79	0	53	**179**	0	0	120	27	0	0	**147**	0	**532**
4:15PM	66	0	80	0	55	**201**	0	0	110	10	0	0	**120**	0	**520**
4:30PM	75	0	92	0	58	**225**	0	0	142	12	0	0	**154**	0	**639**
4:45PM	76	1	76	0	51	**204**	0	0	116	15	0	0	**131**	0	**530**
Hourly Total	264	1	327	0	217	**809**	0	0	488	64	0	0	**552**	0	**2221**
5:00PM	57	0	77	0	52	**186**	0	0	130	7	0	0	**137**	0	**648**
5:15PM	59	0	84	0	61	**204**	0	0	145	10	0	0	**155**	0	**579**
5:30PM	58	0	81	0	49	**188**	0	0	116	9	1	0	**126**	0	**540**
5:45PM	62	0	68	0	45	**175**	0	0	116	9	0	0	**125**	0	**473**
Hourly Total	236	0	310	0	207	**753**	0	0	507	35	1	0	**543**	0	**2240**
Total	1035	2	927	0	803	**2767**	1	0	1861	196	1	0	**2058**	0	**7850**
% Approach	37.4%	0.1%	33.5%	0%	29.0%	**-**	-	0%	90.4%	9.5%	0%	0%	**-**	-	-
% Total	13.2%	0%	11.8%	0%	10.2%	**35.2%**	-	0%	23.7%	2.5%	0%	0%	**26.2%**	-	-
Motorcycles	0	1	4	0	2	**7**	-	0	9	0	0	0	**9**	-	20
% Motorcycles	0%	50.0%	0.4%	0%	0.2%	**0.3%**	-	0%	0.5%	0%	0%	0%	**0.4%**	-	0.3%
Lights	1004	1	864	0	787	**2656**	-	0	1814	194	1	0	**2009**	-	7614
% Lights	97.0%	50.0%	93.2%	0%	98.0%	**96.0%**	-	0%	97.5%	99.0%	100%	0%	**97.6%**	-	97.0%
Heavy	31	0	59	0	14	**104**	-	0	38	2	0	0	**40**	-	216
% Heavy	3.0%	0%	6.4%	0%	1.7%	**3.8%**	-	0%	2.0%	1.0%	0%	0%	**1.9%**	-	2.8%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC
Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 NB Ramps Southbound						French Rd Westbound					
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*
2022-07-26 7:45AM	0	0	0	0	**0**	0	0	176	0	0	**176**	0
8:00AM	0	0	0	0	**0**	0	0	166	0	0	**166**	0
8:15AM	0	0	0	0	**0**	0	0	164	0	0	**164**	0
8:30AM	0	0	0	0	**0**	1	0	159	0	0	**159**	0
Total	0	0	0	0	**0**	1	0	665	0	0	**665**	0
% Approach	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-
% Total	0%	0%	0%	0%	**0%**	-	0%	35.6%	0%	0%	**35.6%**	-
PHF	-	-	-	-	**-**	-	-	0.945	-	-	**0.945**	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-
Lights	0	0	0	0	**0**	-	0	643	0	0	**643**	-
% Lights	0%	0%	0%	0%	**-**	-	0%	96.7%	0%	0%	**96.7%**	-
Heavy	0	0	0	0	**0**	-	0	22	0	0	**22**	-
% Heavy	0%	0%	0%	0%	**-**	-	0%	3.3%	0%	0%	**3.3%**	-
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

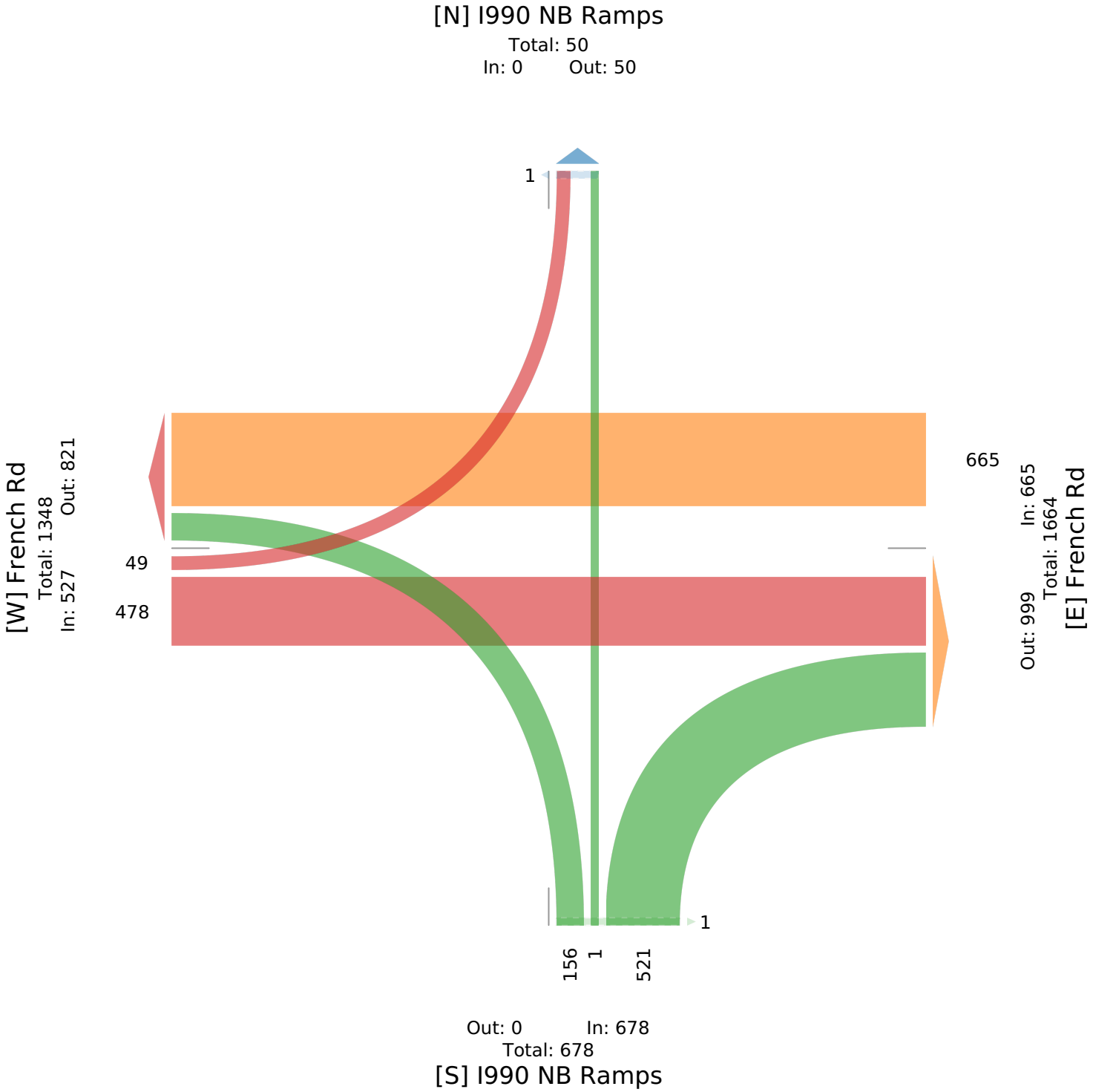
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 NB Ramps Northbound							French Rd Eastbound							
Time	R	T	L	U	RR	**App**	Ped*	R	T	L	U	RR	**App**	Ped*	**Int**
2022-07-26 7:45AM	115	0	41	0	50	**206**	0	0	110	8	0	0	**118**	0	**500**
8:00AM	58	0	42	0	49	**149**	1	0	105	7	0	0	**112**	0	**427**
8:15AM	95	0	43	0	45	**183**	0	0	133	17	0	0	**150**	0	**497**
8:30AM	58	1	30	0	51	**140**	0	0	130	17	0	0	**147**	0	**446**
Total	326	1	156	0	195	**678**	1	0	478	49	0	0	**527**	0	**1870**
% Approach	48.1%	0.1%	23.0%	0%	28.8%	**-**	-	0%	90.7%	9.3%	0%	0%	**-**	-	**-**
% Total	17.4%	0.1%	8.3%	0%	10.4%	**36.3%**	-	0%	25.6%	2.6%	0%	0%	**28.2%**	-	**-**
PHF	0.709	0.250	0.907	-	0.956	**0.823**	-	-	0.898	0.721	-	-	**0.878**	-	0.935
Motorcycles	0	0	0	0	1	**1**	-	0	2	0	0	0	**2**	-	3
% Motorcycles	0%	0%	0%	0%	0.5%	**0.1%**	-	0%	0.4%	0%	0%	0%	**0.4%**	-	0.2%
Lights	309	1	129	0	188	**627**	-	0	457	47	0	0	**504**	-	1774
% Lights	94.8%	100%	82.7%	0%	96.4%	**92.5%**	-	0%	95.6%	95.9%	0%	0%	**95.6%**	-	94.9%
Heavy	17	0	27	0	6	**50**	-	0	19	2	0	0	**21**	-	93
% Heavy	5.2%	0%	17.3%	0%	3.1%	**7.4%**	-	0%	4.0%	4.1%	0%	0%	**4.0%**	-	5.0%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC
Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 NB Ramps Southbound						French Rd Westbound					
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*
2022-07-26 4:30PM	0	0	0	0	**0**	0	0	260	0	0	**260**	0
4:45PM	0	0	0	0	**0**	0	0	195	0	0	**195**	0
5:00PM	0	0	0	0	**0**	0	0	325	0	0	**325**	0
5:15PM	0	0	0	0	**0**	0	0	220	0	0	**220**	0
Total	0	0	0	0	**0**	0	0	1000	0	0	**1000**	0
% Approach	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-
% Total	0%	0%	0%	0%	**0%**	-	0%	41.7%	0%	0%	**41.7%**	-
PHF	-	-	-	-	**-**	-	-	0.769	-	-	**0.769**	-
Motorcycles	0	0	0	0	**0**	-	0	3	0	0	**3**	-
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.3%**	-
Lights	0	0	0	0	**0**	-	0	989	0	0	**989**	-
% Lights	0%	0%	0%	0%	**-**	-	0%	98.9%	0%	0%	**98.9%**	-
Heavy	0	0	0	0	**0**	-	0	8	0	0	**8**	-
% Heavy	0%	0%	0%	0%	**-**	-	0%	0.8%	0%	0%	**0.8%**	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC

Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

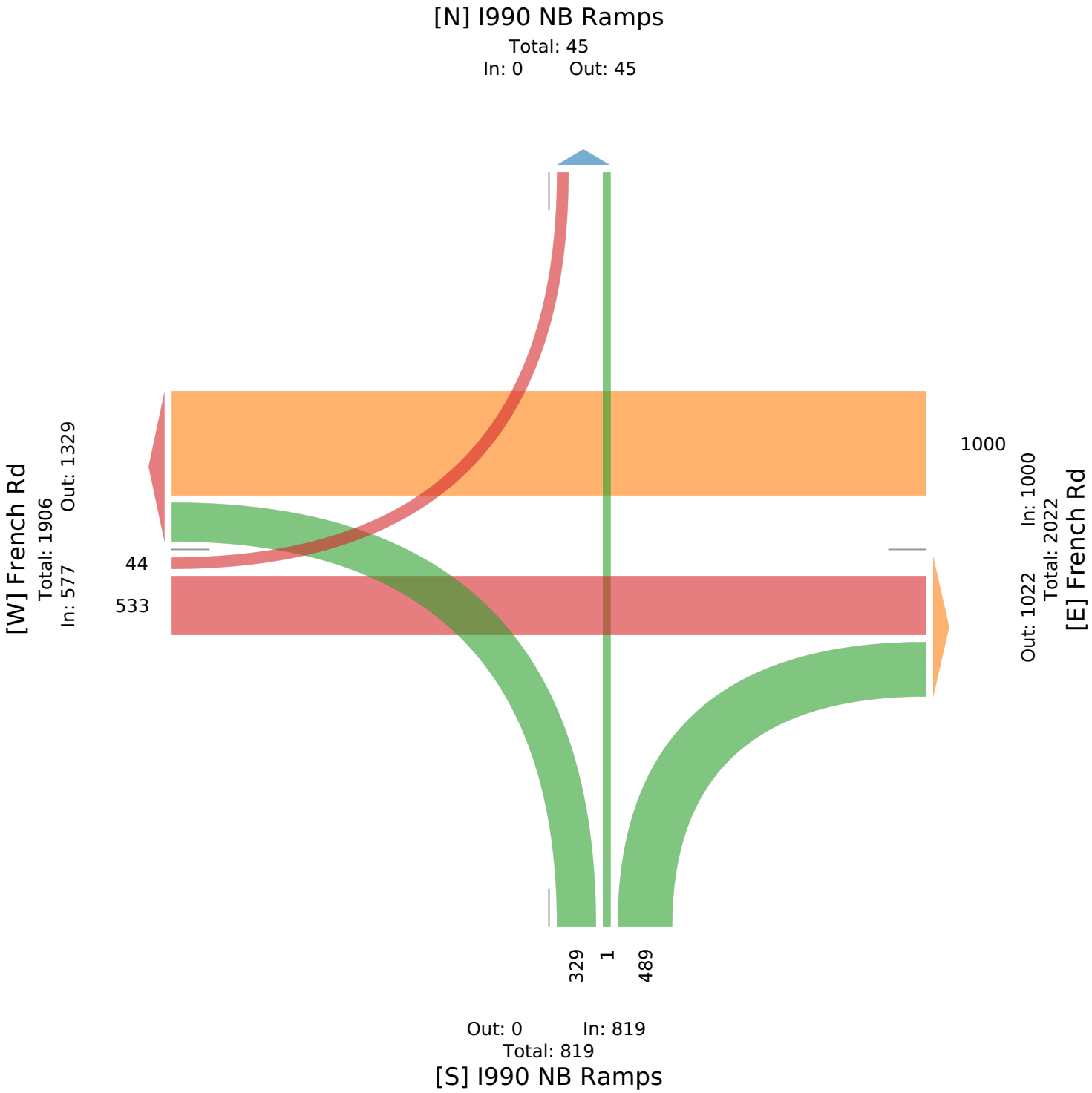
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 NB Ramps Northbound							French Rd Eastbound							
Time	R	T	L	U	RR	**App**	Ped*	R	T	L	U	RR	**App**	Ped*	**Int**
2022-07-26 4:30PM	75	0	92	0	58	**225**	0	0	142	12	0	0	**154**	0	**639**
4:45PM	76	1	76	0	51	**204**	0	0	116	15	0	0	**131**	0	**530**
5:00PM	57	0	77	0	52	**186**	0	0	130	7	0	0	**137**	0	**648**
5:15PM	59	0	84	0	61	**204**	0	0	145	10	0	0	**155**	0	**579**
Total	267	1	329	0	222	**819**	0	0	533	44	0	0	**577**	0	**2396**
% Approach	32.6%	0.1%	40.2%	0%	27.1%	**-**	-	0%	92.4%	7.6%	0%	0%	**-**	-	**-**
% Total	11.1%	0%	13.7%	0%	9.3%	**34.2%**	-	0%	22.2%	1.8%	0%	0%	**24.1%**	-	**-**
PHF	0.878	0.250	0.894	-	0.910	**0.910**	-	-	0.919	0.733	-	-	**0.931**	-	0.924
Motorcycles	0	1	4	0	0	**5**	-	0	4	0	0	0	**4**	-	12
% Motorcycles	0%	100%	1.2%	0%	0%	**0.6%**	-	0%	0.8%	0%	0%	0%	**0.7%**	-	0.5%
Lights	261	0	319	0	221	**801**	-	0	527	44	0	0	**571**	-	2361
% Lights	97.8%	0%	97.0%	0%	99.5%	**97.8%**	-	0%	98.9%	100%	0%	0%	**99.0%**	-	98.5%
Heavy	6	0	6	0	1	**13**	-	0	2	0	0	0	**2**	-	23
% Heavy	2.2%	0%	1.8%	0%	0.5%	**1.6%**	-	0%	0.4%	0%	0%	0%	**0.3%**	-	1.0%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 NB Ramps / French Rd - TMC
Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974743, Location: 43.034807, -78.759085

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg	I990 SB Ramps							N French Rd					
Direction	Southbound							Westbound					
Time	R	T	L	U	RR	App	Ped*	R	T	L	U	App	Ped*
2022-07-26 7:00AM	3	0	0	0	3	**6**	0	0	72	73	0	**145**	0
7:15AM	5	0	2	0	7	**14**	0	0	95	77	0	**172**	0
7:30AM	3	0	0	0	13	**16**	0	0	104	89	0	**193**	0
7:45AM	7	0	1	0	2	**10**	0	0	128	90	0	**218**	0
Hourly Total	18	0	3	0	25	**46**	0	0	399	329	0	**728**	0
8:00AM	3	0	0	0	7	**10**	0	0	108	94	0	**202**	0
8:15AM	9	0	0	0	8	**17**	0	0	103	112	0	**215**	0
8:30AM	8	0	0	0	7	**15**	1	0	110	89	0	**199**	0
8:45AM	5	0	0	0	9	**14**	0	0	117	71	0	**188**	0
Hourly Total	25	0	0	0	31	**56**	1	0	438	366	0	**804**	0
4:00PM	2	0	2	0	5	**9**	0	0	165	120	0	**285**	0
4:15PM	5	0	2	0	6	**13**	0	0	221	77	0	**298**	0
4:30PM	5	0	1	0	7	**13**	0	0	217	152	0	**369**	0
4:45PM	0	0	3	0	9	**12**	0	0	195	81	0	**276**	0
Hourly Total	12	0	8	0	27	**47**	0	0	798	430	0	**1228**	0
5:00PM	0	0	0	0	11	**11**	0	0	226	186	0	**412**	0
5:15PM	3	0	0	0	8	**11**	0	0	202	110	0	**312**	0
5:30PM	5	0	0	0	9	**14**	0	0	197	107	0	**304**	0
5:45PM	4	0	0	0	2	**6**	0	0	161	85	0	**246**	0
Hourly Total	12	0	0	0	30	**42**	0	0	786	488	0	**1274**	0
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0
Total	67	0	11	0	113	**191**	1	0	2421	1613	0	**4034**	0
% Approach	35.1%	0%	5.8%	0%	59.2%	**-**	-	0%	60.0%	40.0%	0%	**-**	-
% Total	0.9%	0%	0.2%	0%	1.5%	**2.6%**	-	0%	33.1%	22.0%	0%	**55.1%**	-
Motorcycles	0	0	0	0	0	**0**	-	0	6	3	0	**9**	-
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0.2%	0.2%	0%	**0.2%**	-
Lights	64	0	10	0	111	**185**	-	0	2306	1563	0	**3869**	-
% Lights	95.5%	0%	90.9%	0%	98.2%	**96.9%**	-	0%	95.2%	96.9%	0%	**95.9%**	-
Heavy	3	0	1	0	2	**6**	-	0	109	47	0	**156**	-
% Heavy	4.5%	0%	9.1%	0%	1.8%	**3.1%**	-	0%	4.5%	2.9%	0%	**3.9%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	0%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	100%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

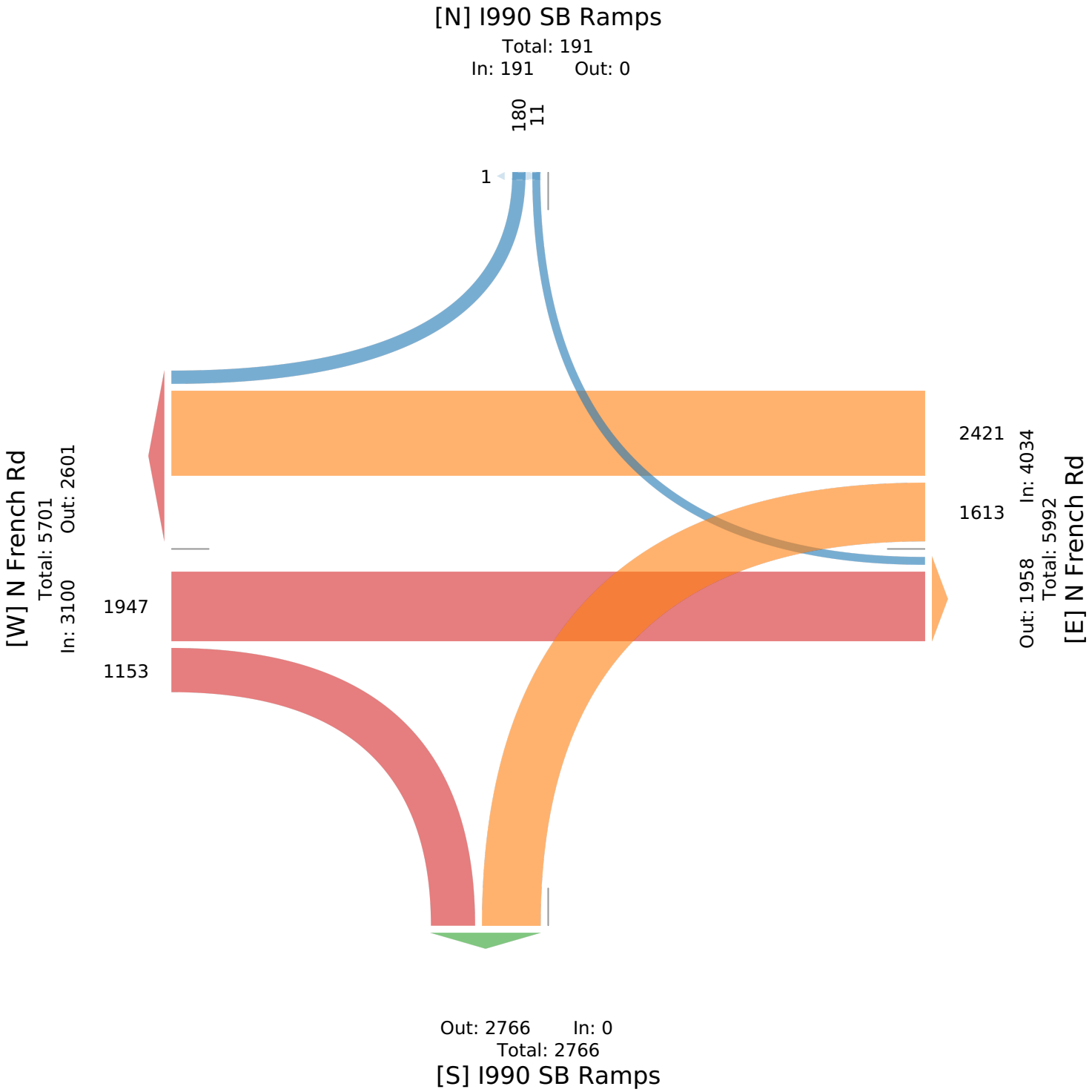
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 SB Ramps Northbound						N French Rd Eastbound							
Time	R	T	L	U	**App**	Ped*	R	T	L	U	RR	**App**	Ped*	**Int**
2022-07-26 7:00AM	0	0	0	0	**0**	0	66	67	0	0	21	**154**	0	**305**
7:15AM	0	0	0	0	**0**	0	67	97	0	0	36	**200**	0	**386**
7:30AM	0	0	0	0	**0**	0	94	107	0	0	16	**217**	0	**426**
7:45AM	0	0	0	0	**0**	0	31	115	0	0	64	**210**	0	**438**
Hourly Total	0	0	0	0	**0**	0	258	386	0	0	137	**781**	0	**1555**
8:00AM	0	0	0	0	**0**	0	49	111	0	0	42	**202**	0	**414**
8:15AM	0	0	0	0	**0**	0	71	138	0	0	32	**241**	0	**473**
8:30AM	0	0	0	0	**0**	0	70	124	0	0	38	**232**	0	**446**
8:45AM	0	0	0	0	**0**	0	14	133	0	0	48	**195**	0	**397**
Hourly Total	0	0	0	0	**0**	0	204	506	0	0	160	**870**	0	**1730**
4:00PM	0	0	0	0	**0**	0	18	129	0	0	30	**177**	0	**471**
4:15PM	0	0	0	0	**0**	0	14	131	0	0	26	**171**	0	**482**
4:30PM	0	0	0	0	**0**	0	25	133	0	0	21	**179**	0	**561**
4:45PM	0	0	0	0	**0**	0	25	132	0	0	19	**176**	0	**464**
Hourly Total	0	0	0	0	**0**	0	82	525	0	0	96	**703**	0	**1978**
5:00PM	0	0	0	0	**0**	0	25	137	0	0	26	**188**	0	**611**
5:15PM	0	0	0	0	**0**	0	29	145	0	0	39	**213**	0	**536**
5:30PM	0	0	0	0	**0**	0	27	131	0	0	27	**185**	0	**503**
5:45PM	0	0	0	0	**0**	0	11	117	0	0	32	**160**	0	**412**
Hourly Total	0	0	0	0	**0**	0	92	530	0	0	124	**746**	0	**2062**
6:00PM	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Total	0	0	0	0	**0**	0	636	1947	0	0	517	**3100**	0	**7325**
% Approach	0%	0%	0%	0%	**-**	-	20.5%	62.8%	0%	0%	16.7%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	8.7%	26.6%	0%	0%	7.1%	**42.3%**	-	**-**
Motorcycles	0	0	0	0	**0**	-	0	10	0	0	7	**17**	-	26
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.5%	0%	0%	1.4%	**0.5%**	-	0.4%
Lights	0	0	0	0	**0**	-	587	1897	0	0	489	**2973**	-	7027
% Lights	0%	0%	0%	0%	**-**	-	92.3%	97.4%	0%	0%	94.6%	**95.9%**	-	95.9%
Heavy	0	0	0	0	**0**	-	49	40	0	0	21	**110**	-	272
% Heavy	0%	0%	0%	0%	**-**	-	7.7%	2.1%	0%	0%	4.1%	**3.5%**	-	3.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC
Tue Jul 26, 2022
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 SB Ramps Southbound							N French Rd Westbound					
Time	R	T	L	U	RR	**App**	Ped*	R	T	L	U	**App**	Ped*
2022-07-26 7:45AM	7	0	1	0	2	**10**	0	0	128	90	0	**218**	0
8:00AM	3	0	0	0	7	**10**	0	0	108	94	0	**202**	0
8:15AM	9	0	0	0	8	**17**	0	0	103	112	0	**215**	0
8:30AM	8	0	0	0	7	**15**	1	0	110	89	0	**199**	0
Total	27	0	1	0	24	**52**	1	0	449	385	0	**834**	0
% Approach	51.9%	0%	1.9%	0%	46.2%	**-**	-	0%	53.8%	46.2%	0%	**-**	-
% Total	1.5%	0%	0.1%	0%	1.4%	**2.9%**	-	0%	25.4%	21.7%	0%	**47.1%**	-
PHF	0.750	-	0.250	-	0.750	**0.765**	-	-	0.877	0.859	-	**0.956**	-
Motorcycles	0	0	0	0	0	**0**	-	0	1	0	0	**1**	-
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-
Lights	25	0	1	0	23	**49**	-	0	401	372	0	**773**	-
% Lights	92.6%	0%	100%	0%	95.8%	**94.2%**	-	0%	89.3%	96.6%	0%	**92.7%**	-
Heavy	2	0	0	0	1	**3**	-	0	47	13	0	**60**	-
% Heavy	7.4%	0%	0%	0%	4.2%	**5.8%**	-	0%	10.5%	3.4%	0%	**7.2%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	0%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	100%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

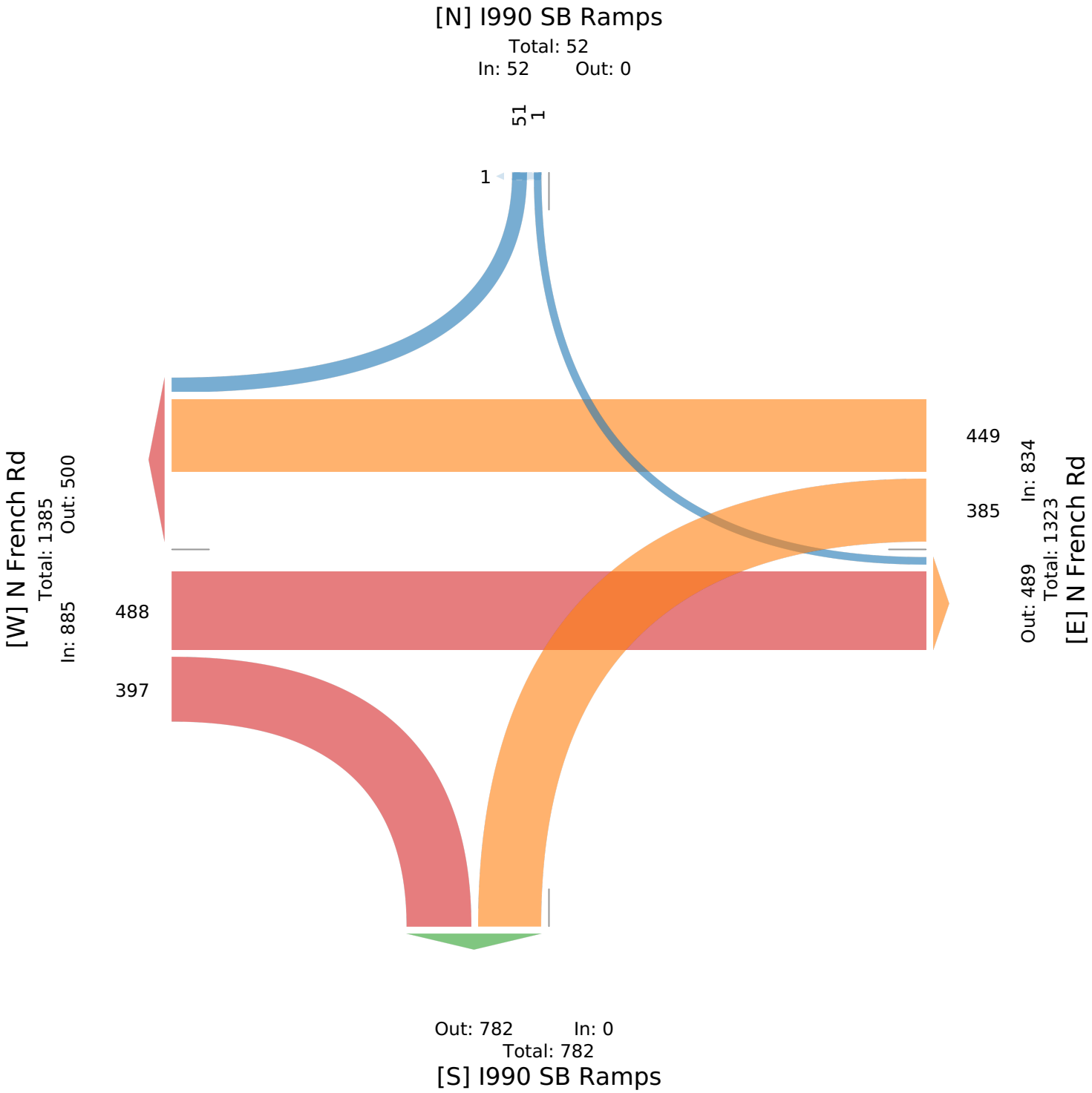
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 SB Ramps Northbound						N French Rd Eastbound							
Time	R	T	L	U	**App**	Ped*	R	T	L	U	RR	**App**	Ped*	**Int**
2022-07-26 7:45AM	0	0	0	0	**0**	0	31	115	0	0	64	**210**	0	**438**
8:00AM	0	0	0	0	**0**	0	49	111	0	0	42	**202**	0	**414**
8:15AM	0	0	0	0	**0**	0	71	138	0	0	32	**241**	0	**473**
8:30AM	0	0	0	0	**0**	0	70	124	0	0	38	**232**	0	**446**
Total	0	0	0	0	**0**	0	221	488	0	0	176	**885**	0	**1771**
% Approach	0%	0%	0%	0%	**-**	-	25.0%	55.1%	0%	0%	19.9%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	12.5%	27.6%	0%	0%	9.9%	**50.0%**	-	**-**
PHF	-	-	-	-	**-**	-	0.778	0.884	-	-	0.688	**0.918**	-	0.936
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	2	**3**	-	4
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	1.1%	**0.3%**	-	0.2%
Lights	0	0	0	0	**0**	-	198	470	0	0	167	**835**	-	1657
% Lights	0%	0%	0%	0%	**-**	-	89.6%	96.3%	0%	0%	94.9%	**94.4%**	-	93.6%
Heavy	0	0	0	0	**0**	-	23	17	0	0	7	**47**	-	110
% Heavy	0%	0%	0%	0%	**-**	-	10.4%	3.5%	0%	0%	4.0%	**5.3%**	-	6.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC
Tue Jul 26, 2022
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 SB Ramps Southbound							N French Rd Westbound					
Time	R	T	L	U	RR	**App**	Ped*	R	T	L	U	**App**	Ped*
2022-07-26 4:30PM	5	0	1	0	7	**13**	0	0	217	152	0	**369**	0
4:45PM	0	0	3	0	9	**12**	0	0	195	81	0	**276**	0
5:00PM	0	0	0	0	11	**11**	0	0	226	186	0	**412**	0
5:15PM	3	0	0	0	8	**11**	0	0	202	110	0	**312**	0
Total	8	0	4	0	35	**47**	0	0	840	529	0	**1369**	0
% Approach	17.0%	0%	8.5%	0%	74.5%	**-**	-	0%	61.4%	38.6%	0%	**-**	-
% Total	0.4%	0%	0.2%	0%	1.6%	**2.2%**	-	0%	38.7%	24.4%	0%	**63.0%**	-
PHF	0.400	-	0.333	-	0.795	**0.904**	-	-	0.929	0.711	-	**0.831**	-
Motorcycles	0	0	0	0	0	**0**	-	0	3	2	0	**5**	-
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0.4%	0.4%	0%	**0.4%**	-
Lights	8	0	4	0	35	**47**	-	0	825	519	0	**1344**	-
% Lights	100%	0%	100%	0%	100%	**100%**	-	0%	98.2%	98.1%	0%	**98.2%**	-
Heavy	0	0	0	0	0	**0**	-	0	12	8	0	**20**	-
% Heavy	0%	0%	0%	0%	0%	**0%**	-	0%	1.4%	1.5%	0%	**1.5%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC

Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

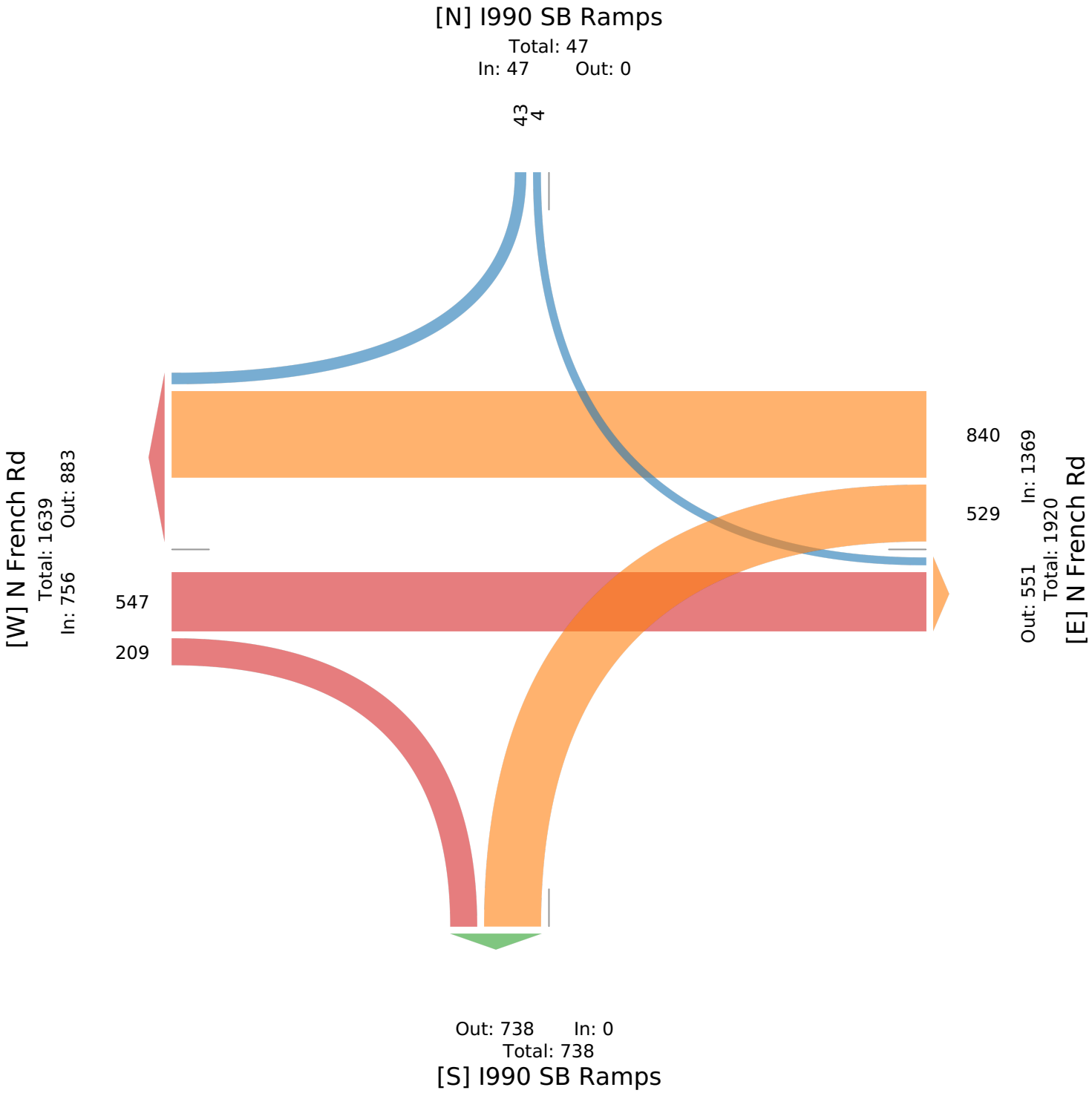
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	I990 SB Ramps Northbound						N French Rd Eastbound							
Time	R	T	L	U	**App**	Ped*	R	T	L	U	RR	**App**	Ped*	**Int**
2022-07-26 4:30PM	0	0	0	0	**0**	0	25	133	0	0	21	**179**	0	**561**
4:45PM	0	0	0	0	**0**	0	25	132	0	0	19	**176**	0	**464**
5:00PM	0	0	0	0	**0**	0	25	137	0	0	26	**188**	0	**611**
5:15PM	0	0	0	0	**0**	0	29	145	0	0	39	**213**	0	**536**
Total	0	0	0	0	**0**	0	104	547	0	0	105	**756**	0	**2172**
% Approach	0%	0%	0%	0%	**-**	-	13.8%	72.4%	0%	0%	13.9%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	4.8%	25.2%	0%	0%	4.8%	**34.8%**	-	**-**
PHF	-	-	-	-	**-**	-	0.897	0.943	-	-	0.673	**0.887**	-	0.889
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	1	**3**	-	8
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.4%	0%	0%	1.0%	**0.4%**	-	0.4%
Lights	0	0	0	0	**0**	-	98	542	0	0	99	**739**	-	2130
% Lights	0%	0%	0%	0%	**-**	-	94.2%	99.1%	0%	0%	94.3%	**97.8%**	-	98.1%
Heavy	0	0	0	0	**0**	-	6	3	0	0	5	**14**	-	34
% Heavy	0%	0%	0%	0%	**-**	-	5.8%	0.5%	0%	0%	4.8%	**1.9%**	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

I990 SB Ramps / N French Rd - TMC
Tue Jul 26, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 974742, Location: 43.034796, -78.760736

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



PASSERO ASSOCIATES

242 W Main St, Suite 100
Rochester, New York 14614

File Name : Not Named 1
Site Code : 20233626
Start Date : 7/11/2023
Page No : 1

Groups Printed- Unshifted - Bank 1

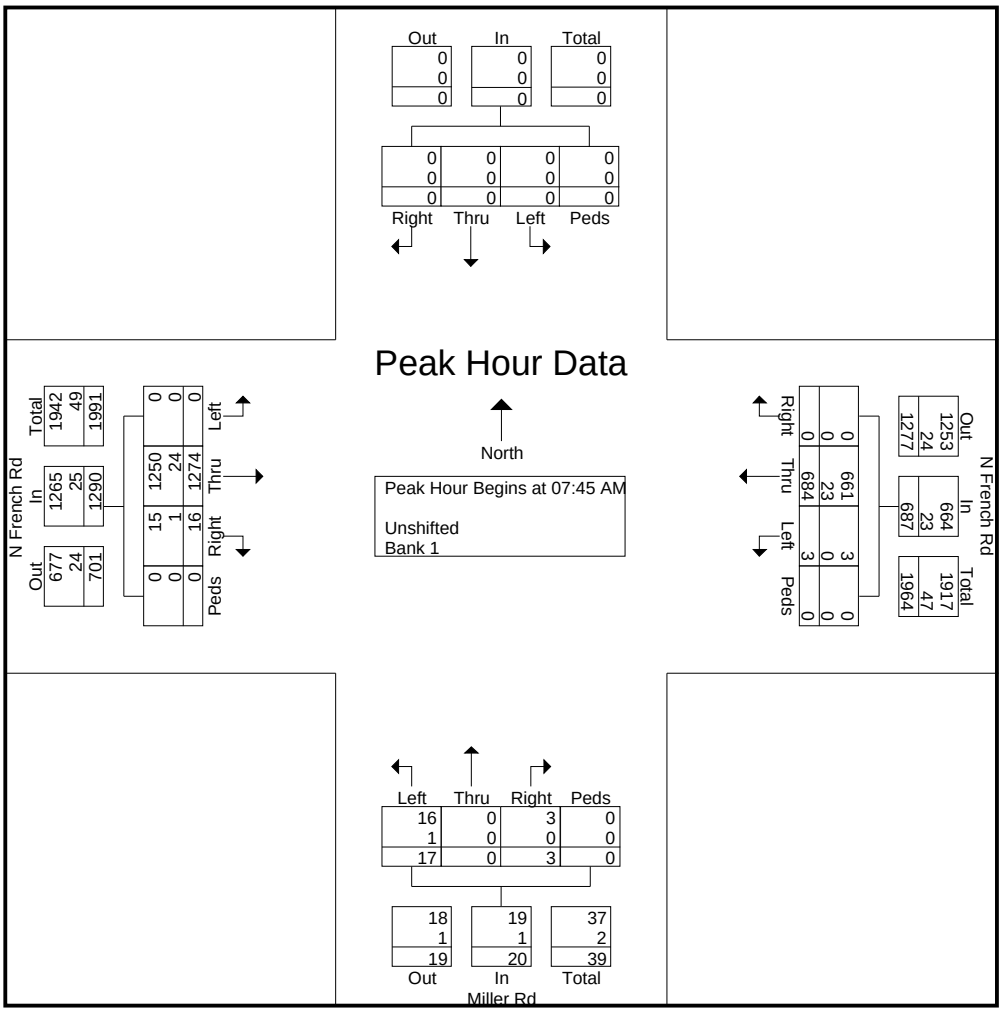
	From North					N French Rd From East					Miller Rd From South					N French Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	113	1	0	114	0	0	4	0	4	0	181	0	0	181	299
07:15 AM	0	0	0	0	0	0	156	0	0	156	0	0	1	0	1	2	250	0	0	252	409
07:30 AM	0	0	0	0	0	0	164	0	0	164	3	0	4	0	7	3	313	0	0	316	487
07:45 AM	0	0	0	0	0	0	173	0	0	173	0	0	8	0	8	5	370	0	0	375	556
Total	0	0	0	0	0	0	606	1	0	607	3	0	17	0	20	10	1114	0	0	1124	1751
08:00 AM	0	0	0	0	0	0	170	1	0	171	0	0	1	0	1	4	282	0	0	286	458
08:15 AM	0	0	0	0	0	0	169	1	0	170	3	0	2	0	5	4	306	0	0	310	485
08:30 AM	0	0	0	0	0	0	172	1	0	173	0	0	6	0	6	3	316	0	0	319	498
08:45 AM	0	0	0	0	0	0	167	2	0	169	1	0	6	0	7	1	321	0	0	322	498
Total	0	0	0	0	0	0	678	5	0	683	4	0	15	0	19	12	1225	0	0	1237	1939
Grand Total	0	0	0	0	0	0	1284	6	0	1290	7	0	32	0	39	22	2339	0	0	2361	3690
Apprch %	0	0	0	0		0	99.5	0.5	0		17.9	0	82.1	0		0.9	99.1	0	0		
Total %	0	0	0	0	0	0	34.8	0.2	0	35	0.2	0	0.9	0	1.1	0.6	63.4	0	0	64	
Unshifted	0	0	0	0	0	0	1241										2302				
% Unshifted	0	0	0	0	0	0	96.7	100	0	96.7	100	0	93.8	0	94.9	95.5	98.4	0	0	98.4	97.8
Bank 1	0	0	0	0	0	0	43	0	0	43	0	0	2	0	2	1	37	0	0	38	83
% Bank 1	0	0	0	0	0	0	3.3	0	0	3.3	0	0	6.2	0	5.1	4.5	1.6	0	0	1.6	2.2

PASSERO ASSOCIATES

242 W Main St, Suite 100
Rochester, New York 14614

File Name : Not Named 1
Site Code : 20233626
Start Date : 7/11/2023
Page No : 2

Start Time	From North					N French Rd From East					Miller Rd From South					N French Rd From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	0	**173**	0	0	**173**	0	0	**8**	0	**8**	**5**	**370**	0	0	**375**	**556**
08:00 AM	0	0	0	0	0	0	170	**1**	0	171	0	0	1	0	1	4	282	0	0	286	458
08:15 AM	0	0	0	0	0	0	169	1	0	170	**3**	0	2	0	5	4	306	0	0	310	485
08:30 AM	0	0	0	0	0	0	172	1	0	173	0	0	6	0	6	3	316	0	0	319	498
Total Volume	0	0	0	0	0	0	684	3	0	687	3	0	17	0	20	16	1274	0	0	1290	1997
% App. Total	0	0	0	0		0	99.6	0.4	0		15	0	85	0		1.2	98.8	0	0		
PHF	.000	.000	.000	.000	.000	.000	.988	.750	.000	.993	.250	.000	.531	.000	.625	.800	.861	.000	.000	.860	.898
Unshifted	0	0	0	0	0	0	661	3	0	664	3	0	16	0	19	15	1250				
% Unshifted	0	0	0	0	0	0	96.6	100	0	96.7	100	0	94.1	0	95.0	93.8	98.1	0	0	98.1	97.5
Bank 1	0	0	0	0	0	0	23	0	0	23	0	0	1	0	1	1	24	0	0	25	49
% Bank 1	0	0	0	0	0	0	3.4	0	0	3.3	0	0	5.9	0	5.0	6.3	1.9	0	0	1.9	2.5



PASSERO ASSOCIATES

242 W Main St, Suite 100
Rochester, New York 14614

File Name : N French Rd-Miller Rd PM Peak
Site Code : 20233626
Start Date : 7/11/2023
Page No : 1

Groups Printed- Unshifted - Bank 1

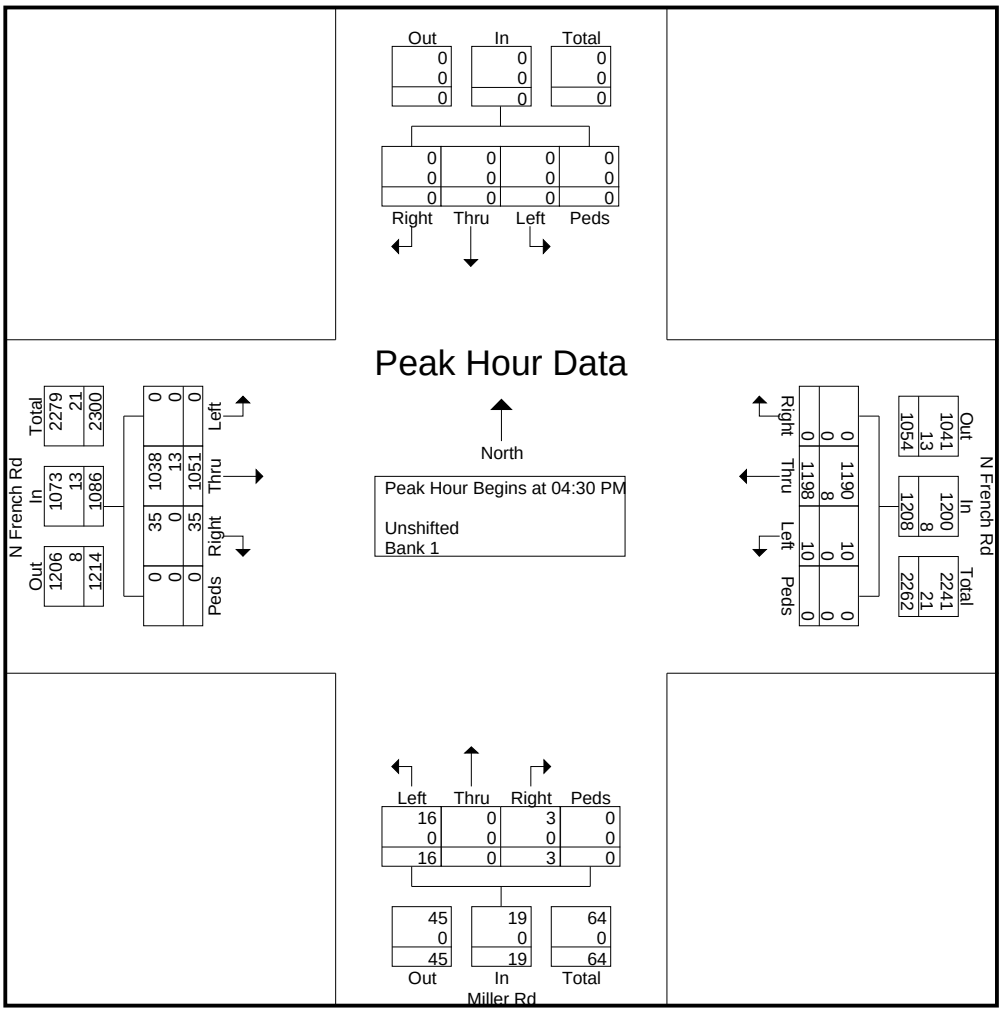
	From North					N French Rd From East					Miller Rd From South					N French Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	257	1	0	258	0	0	4	0	4	10	237	0	0	247	509
04:15 PM	0	0	0	0	0	0	233	0	0	233	1	0	3	0	4	7	212	0	0	219	456
04:30 PM	0	0	0	0	0	0	313	2	0	315	1	0	4	0	5	7	242	0	0	249	569
04:45 PM	0	0	0	0	0	0	280	1	0	281	0	0	4	0	4	9	289	0	0	298	583
Total	0	0	0	0	0	0	1083	4	0	1087	2	0	15	0	17	33	980	0	0	1013	2117
05:00 PM	0	0	0	0	0	0	350	4	0	354	1	0	4	0	5	6	243	0	0	249	608
05:15 PM	0	0	0	0	0	0	255	3	0	258	1	0	4	0	5	13	277	0	0	290	553
05:30 PM	0	0	0	0	0	0	321	6	0	327	2	0	1	0	3	13	237	0	0	250	580
05:45 PM	0	0	0	0	0	0	207	2	0	209	1	0	3	0	4	7	239	0	0	246	459
Total	0	0	0	0	0	0	1133	15	0	1148	5	0	12	0	17	39	996	0	0	1035	2200
Grand Total	0	0	0	0	0	0	2216	19	0	2235	7	0	27	0	34	72	1976	0	0	2048	4317
Apprch %	0	0	0	0		0	99.1	0.9	0		20.6	0	79.4	0		3.5	96.5	0	0		
Total %	0	0	0	0	0	0	51.3	0.4	0	51.8	0.2	0	0.6	0	0.8	1.7	45.8	0	0	47.4	
Unshifted	0	0	0	0	0	0	2204										1946				
% Unshifted	0	0	0	0	0	0	99.5	100	0	99.5	100	0	100	0	100	100	98.5	0	0	98.5	99
Bank 1	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	30	0	0	30	42
% Bank 1	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0	1.5	0	0	1.5	1

PASSERO ASSOCIATES

242 W Main St, Suite 100
Rochester, New York 14614

File Name : N French Rd-Miller Rd PM Peak
Site Code : 20233626
Start Date : 7/11/2023
Page No : 2

	From North					N French Rd From East					Miller Rd From South					N French Rd From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	313	2	0	315	**1**	0	**4**	0	**5**	7	242	0	0	249	569
04:45 PM	0	0	0	0	0	0	280	1	0	281	0	0	4	0	4	9	**289**	0	0	**298**	583
05:00 PM	0	0	0	0	0	0	**350**	**4**	0	**354**	1	0	4	0	5	6	243	0	0	249	**608**
05:15 PM	0	0	0	0	0	0	255	3	0	258	1	0	4	0	5	**13**	277	0	0	290	553
Total Volume	0	0	0	0	0	0	1198	10	0	1208	3	0	16	0	19	35	1051	0	0	1086	2313
% App. Total	0	0	0	0		0	99.2	0.8	0		15.8	0	84.2	0		3.2	96.8	0	0		
PHF	.000	.000	.000	.000	.000	.000	.856	.625	.000	.853	.750	.000	1.00	.000	.950	.673	.909	.000	.000	.911	.951
Unshifted	0	0	0	0	0	0	1190										1038				
% Unshifted	0	0	0	0	0	0	99.3	100	0	99.3	100	0	100	0	100	100	98.8	0	0	98.8	99.1
Bank 1	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	21
% Bank 1	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0	1.2	0	0	1.2	0.9



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

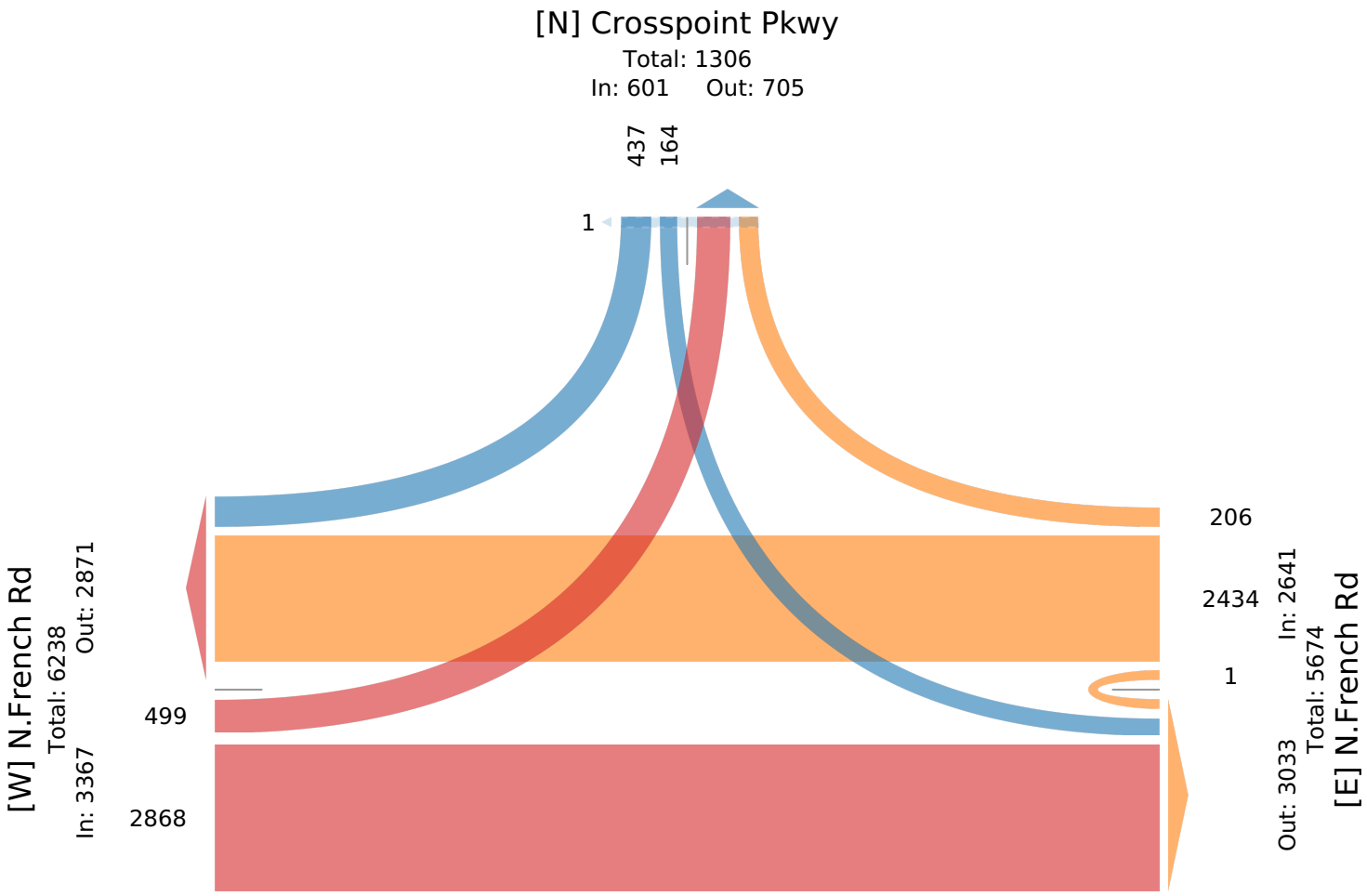
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg / Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	App	Ped*	R	T	U	RR	App	Ped*	T	L	U	App	Ped*	Int
2021-10-06 7:00AM	5	6	0	6	**17**	0	11	123	0	3	**137**	0	103	17	0	**120**	0	**274**
7:15AM	5	2	0	5	**12**	0	13	192	0	1	**206**	0	182	24	0	**206**	0	**424**
7:30AM	10	8	0	3	**21**	0	9	177	0	3	**189**	0	179	44	0	**223**	0	**433**
7:45AM	12	8	0	3	**23**	1	18	187	0	6	**211**	0	171	76	0	**247**	0	**481**
Hourly Total	32	24	0	17	**73**	1	51	679	0	13	**743**	0	635	161	0	**796**	0	**1612**
8:00AM	8	4	0	5	**17**	0	19	130	0	4	**153**	0	138	61	0	**199**	0	**369**
8:15AM	6	6	0	6	**18**	0	15	156	0	1	**172**	0	154	52	0	**206**	0	**396**
8:30AM	4	3	0	6	**13**	0	13	140	0	3	**156**	0	150	42	0	**192**	0	**361**
8:45AM	2	8	0	8	**18**	0	8	124	0	7	**139**	0	127	40	0	**167**	0	**324**
Hourly Total	20	21	0	25	**66**	0	55	550	0	15	**620**	0	569	195	0	**764**	0	**1450**
9:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
4:00PM	13	8	0	23	**44**	0	9	143	0	2	**154**	0	212	14	0	**226**	0	**424**
4:15PM	10	7	0	24	**41**	0	6	151	0	0	**157**	0	195	21	0	**216**	0	**414**
4:30PM	33	23	0	34	**90**	0	3	157	1	0	**161**	0	200	23	0	**223**	0	**474**
4:45PM	8	10	0	26	**44**	0	6	136	0	1	**143**	0	218	16	0	**234**	0	**421**
Hourly Total	64	48	0	107	**219**	0	24	587	1	3	**615**	0	825	74	0	**899**	0	**1733**
5:00PM	38	19	0	15	**72**	0	9	164	0	6	**179**	0	221	9	0	**230**	0	**481**
5:15PM	14	15	0	17	**46**	0	7	149	0	3	**159**	0	219	16	0	**235**	0	**440**
5:30PM	24	22	0	33	**79**	0	8	166	0	3	**177**	0	205	28	0	**233**	0	**489**
5:45PM	9	15	0	22	**46**	0	5	139	0	4	**148**	0	194	16	0	**210**	0	**404**
Hourly Total	85	71	0	87	**243**	0	29	618	0	16	**663**	0	839	69	0	**908**	0	**1814**
Total	201	164	0	236	**601**	1	159	2434	1	47	**2641**	0	2868	499	0	**3367**	0	**6609**
% Approach	33.4%	27.3%	0%	39.3%	**-**	-	6.0%	92.2%	0%	1.8%	**-**	-	85.2%	14.8%	0%	**-**	-	-
% Total	3.0%	2.5%	0%	3.6%	**9.1%**	-	2.4%	36.8%	0%	0.7%	**40.0%**	-	43.4%	7.6%	0%	**50.9%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	4	0	0	**4**	-	8	0	0	**8**	-	13
% Motorcycles	0%	0.6%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.3%	0%	0%	**0.2%**	-	0.2%
Lights	197	156	0	230	**583**	-	151	2361	1	46	**2559**	-	2781	495	0	**3276**	-	6418
% Lights	98.0%	95.1%	0%	97.5%	**97.0%**	-	95.0%	97.0%	100%	97.9%	**96.9%**	-	97.0%	99.2%	0%	**97.3%**	-	97.1%
Heavy	4	7	0	6	**17**	-	8	69	0	1	**78**	-	79	4	0	**83**	-	178
% Heavy	2.0%	4.3%	0%	2.5%	**2.8%**	-	5.0%	2.8%	0%	2.1%	**3.0%**	-	2.8%	0.8%	0%	**2.5%**	-	2.7%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

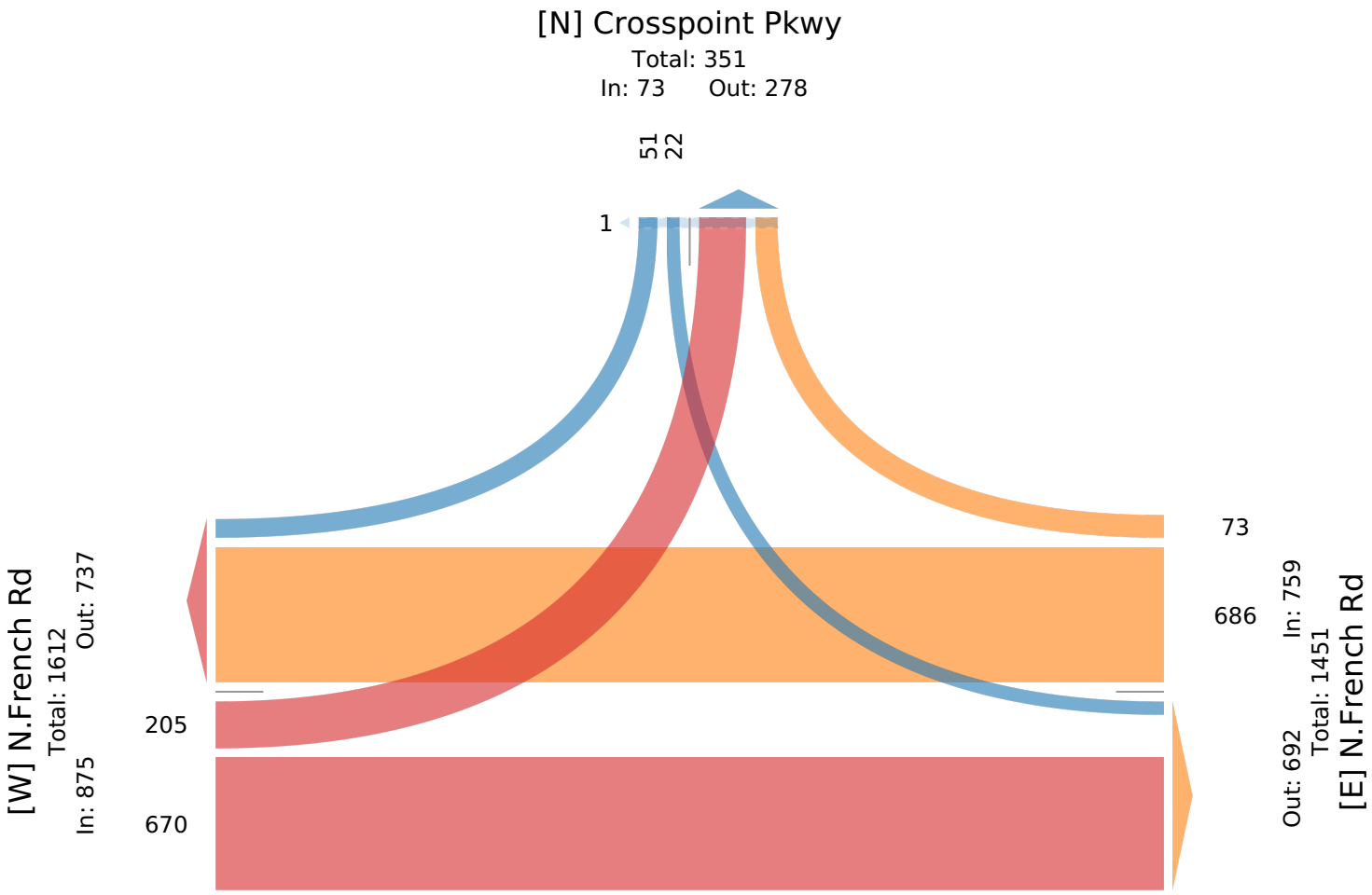
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 7:15AM	5	2	0	5	**12**	0	13	192	0	1	**206**	0	182	24	0	**206**	0	**424**
7:30AM	10	8	0	3	**21**	0	9	177	0	3	**189**	0	179	44	0	**223**	0	**433**
7:45AM	12	8	0	3	**23**	1	18	187	0	6	**211**	0	171	76	0	**247**	0	**481**
8:00AM	8	4	0	5	**17**	0	19	130	0	4	**153**	0	138	61	0	**199**	0	**369**
Total	35	22	0	16	**73**	1	59	686	0	14	**759**	0	670	205	0	**875**	0	**1707**
% Approach	47.9%	30.1%	0%	21.9%	**-**	-	7.8%	90.4%	0%	1.8%	**-**	-	76.6%	23.4%	0%	**-**	-	-
% Total	2.1%	1.3%	0%	0.9%	**4.3%**	-	3.5%	40.2%	0%	0.8%	**44.5%**	-	39.3%	12.0%	0%	**51.3%**	-	-
PHF	0.729	0.688	-	0.800	**0.793**	-	0.776	0.893	-	0.583	**0.899**	-	0.920	0.674	-	**0.886**	-	0.887
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.1%	0%	0%	**0.1%**	-	0.2%
Lights	33	20	0	16	**69**	-	57	661	0	14	**732**	-	646	204	0	**850**	-	1651
% Lights	94.3%	90.9%	0%	100%	**94.5%**	-	96.6%	96.4%	0%	100%	**96.4%**	-	96.4%	99.5%	0%	**97.1%**	-	96.7%
Heavy	2	2	0	0	**4**	-	2	23	0	0	**25**	-	23	1	0	**24**	-	53
% Heavy	5.7%	9.1%	0%	0%	**5.5%**	-	3.4%	3.4%	0%	0%	**3.3%**	-	3.4%	0.5%	0%	**2.7%**	-	3.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
Forced Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

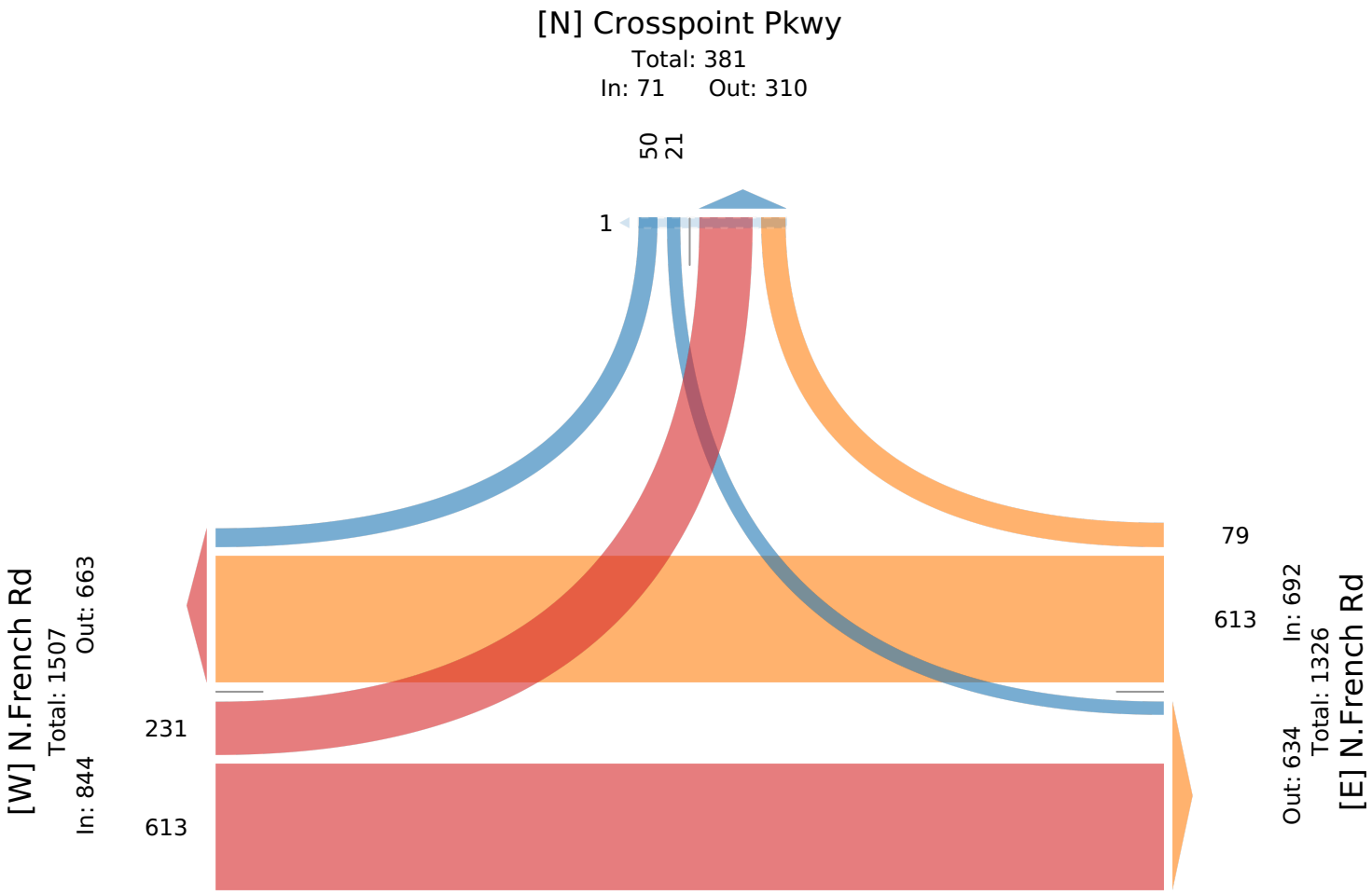
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 7:45AM	12	8	0	3	**23**	1	18	187	0	6	**211**	0	171	76	0	**247**	0	**481**
8:00AM	8	4	0	5	**17**	0	19	130	0	4	**153**	0	138	61	0	**199**	0	**369**
8:15AM	6	6	0	6	**18**	0	15	156	0	1	**172**	0	154	52	0	**206**	0	**396**
8:30AM	4	3	0	6	**13**	0	13	140	0	3	**156**	0	150	42	0	**192**	0	**361**
Total	30	21	0	20	**71**	1	65	613	0	14	**692**	0	613	231	0	**844**	0	**1607**
% Approach	42.3%	29.6%	0%	28.2%	**-**	-	9.4%	88.6%	0%	2.0%	**-**	-	72.6%	27.4%	0%	**-**	-	-
% Total	1.9%	1.3%	0%	1.2%	**4.4%**	-	4.0%	38.1%	0%	0.9%	**43.1%**	-	38.1%	14.4%	0%	**52.5%**	-	-
PHF	0.625	0.656	-	0.833	**0.772**	-	0.855	0.820	-	0.583	**0.820**	-	0.896	0.760	-	**0.854**	-	0.835
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	**0%**	-	0.1%
Lights	28	20	0	19	**67**	-	62	585	0	13	**660**	-	585	229	0	**814**	-	1541
% Lights	93.3%	95.2%	0%	95.0%	**94.4%**	-	95.4%	95.4%	0%	92.9%	**95.4%**	-	95.4%	99.1%	0%	**96.4%**	-	95.9%
Heavy	2	1	0	1	**4**	-	3	26	0	1	**30**	-	28	2	0	**30**	-	64
% Heavy	6.7%	4.8%	0%	5.0%	**5.6%**	-	4.6%	4.2%	0%	7.1%	**4.3%**	-	4.6%	0.9%	0%	**3.6%**	-	4.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
Forced Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

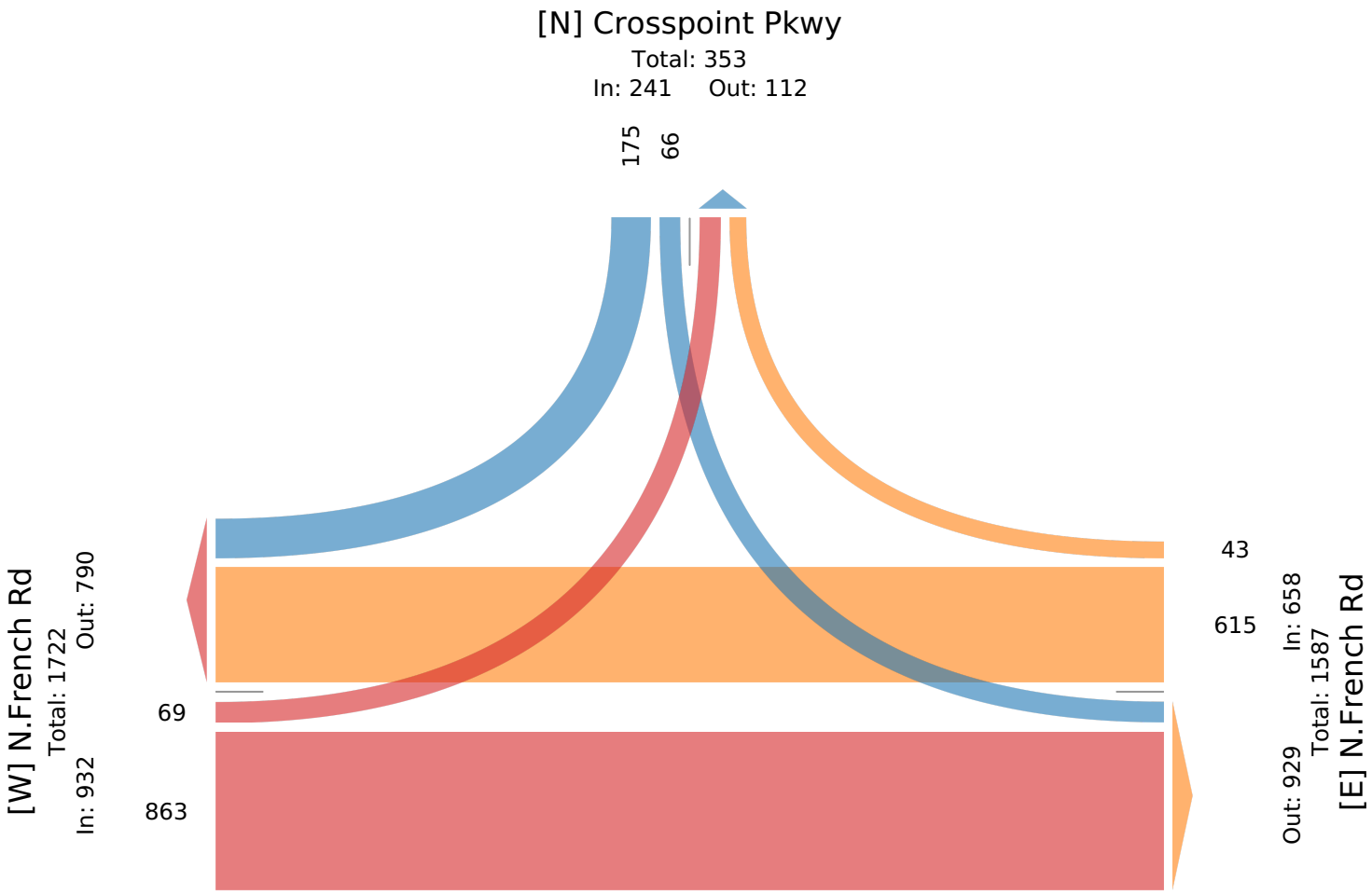
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 4:45PM	8	10	0	26	**44**	0	6	136	0	1	**143**	0	218	16	0	**234**	0	**421**
5:00PM	38	19	0	15	**72**	0	9	164	0	6	**179**	0	221	9	0	**230**	0	**481**
5:15PM	14	15	0	17	**46**	0	7	149	0	3	**159**	0	219	16	0	**235**	0	**440**
5:30PM	24	22	0	33	**79**	0	8	166	0	3	**177**	0	205	28	0	**233**	0	**489**
Total	84	66	0	91	**241**	0	30	615	0	13	**658**	0	863	69	0	**932**	0	**1831**
% Approach	34.9%	27.4%	0%	37.8%	**-**	-	4.6%	93.5%	0%	2.0%	**-**	-	92.6%	7.4%	0%	**-**	-	-
% Total	4.6%	3.6%	0%	5.0%	**13.2%**	-	1.6%	33.6%	0%	0.7%	**35.9%**	-	47.1%	3.8%	0%	**50.9%**	-	-
PHF	0.553	0.750	-	0.689	**0.763**	-	0.833	0.926	-	0.542	**0.919**	-	0.976	0.616	-	**0.991**	-	0.936
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	5	0	0	**5**	-	7
% Motorcycles	0%	1.5%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.6%	0%	0%	**0.5%**	-	0.4%
Lights	84	63	0	91	**238**	-	29	609	0	13	**651**	-	849	69	0	**918**	-	1807
% Lights	100%	95.5%	0%	100%	**98.8%**	-	96.7%	99.0%	0%	100%	**98.9%**	-	98.4%	100%	0%	**98.5%**	-	98.7%
Heavy	0	2	0	0	**2**	-	1	5	0	0	**6**	-	9	0	0	**9**	-	17
% Heavy	0%	3.0%	0%	0%	**0.8%**	-	3.3%	0.8%	0%	0%	**0.9%**	-	1.0%	0%	0%	**1.0%**	-	0.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

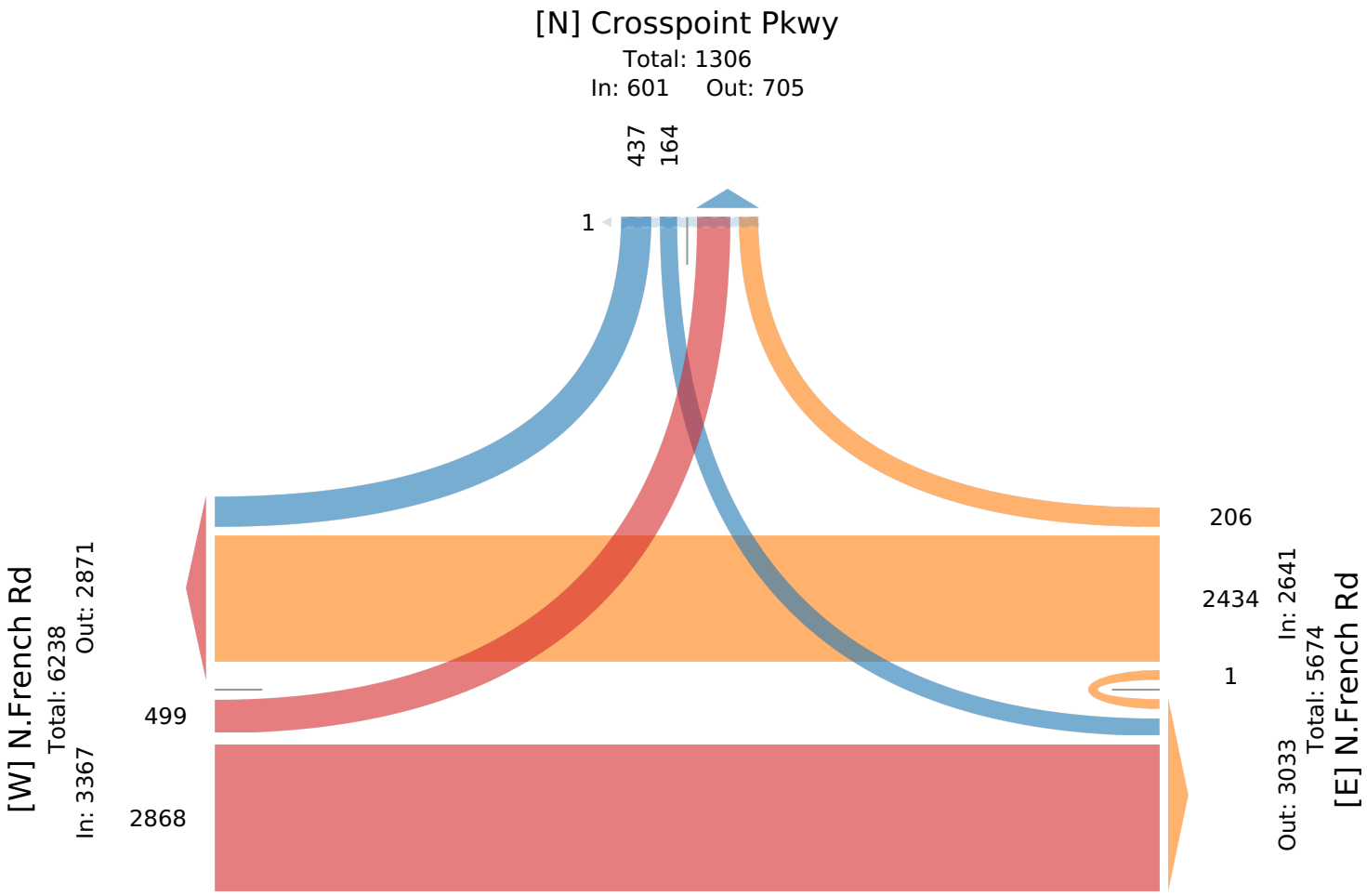
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg / Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	App	Ped*	R	T	U	RR	App	Ped*	T	L	U	App	Ped*	Int
2021-10-06 7:00AM	5	6	0	6	**17**	0	11	123	0	3	**137**	0	103	17	0	**120**	0	**274**
7:15AM	5	2	0	5	**12**	0	13	192	0	1	**206**	0	182	24	0	**206**	0	**424**
7:30AM	10	8	0	3	**21**	0	9	177	0	3	**189**	0	179	44	0	**223**	0	**433**
7:45AM	12	8	0	3	**23**	1	18	187	0	6	**211**	0	171	76	0	**247**	0	**481**
Hourly Total	32	24	0	17	**73**	1	51	679	0	13	**743**	0	635	161	0	**796**	0	**1612**
8:00AM	8	4	0	5	**17**	0	19	130	0	4	**153**	0	138	61	0	**199**	0	**369**
8:15AM	6	6	0	6	**18**	0	15	156	0	1	**172**	0	154	52	0	**206**	0	**396**
8:30AM	4	3	0	6	**13**	0	13	140	0	3	**156**	0	150	42	0	**192**	0	**361**
8:45AM	2	8	0	8	**18**	0	8	124	0	7	**139**	0	127	40	0	**167**	0	**324**
Hourly Total	20	21	0	25	**66**	0	55	550	0	15	**620**	0	569	195	0	**764**	0	**1450**
9:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
4:00PM	13	8	0	23	**44**	0	9	143	0	2	**154**	0	212	14	0	**226**	0	**424**
4:15PM	10	7	0	24	**41**	0	6	151	0	0	**157**	0	195	21	0	**216**	0	**414**
4:30PM	33	23	0	34	**90**	0	3	157	1	0	**161**	0	200	23	0	**223**	0	**474**
4:45PM	8	10	0	26	**44**	0	6	136	0	1	**143**	0	218	16	0	**234**	0	**421**
Hourly Total	64	48	0	107	**219**	0	24	587	1	3	**615**	0	825	74	0	**899**	0	**1733**
5:00PM	38	19	0	15	**72**	0	9	164	0	6	**179**	0	221	9	0	**230**	0	**481**
5:15PM	14	15	0	17	**46**	0	7	149	0	3	**159**	0	219	16	0	**235**	0	**440**
5:30PM	24	22	0	33	**79**	0	8	166	0	3	**177**	0	205	28	0	**233**	0	**489**
5:45PM	9	15	0	22	**46**	0	5	139	0	4	**148**	0	194	16	0	**210**	0	**404**
Hourly Total	85	71	0	87	**243**	0	29	618	0	16	**663**	0	839	69	0	**908**	0	**1814**
Total	201	164	0	236	**601**	1	159	2434	1	47	**2641**	0	2868	499	0	**3367**	0	**6609**
% Approach	33.4%	27.3%	0%	39.3%	**-**	-	6.0%	92.2%	0%	1.8%	**-**	-	85.2%	14.8%	0%	**-**	-	-
% Total	3.0%	2.5%	0%	3.6%	**9.1%**	-	2.4%	36.8%	0%	0.7%	**40.0%**	-	43.4%	7.6%	0%	**50.9%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	4	0	0	**4**	-	8	0	0	**8**	-	13
% Motorcycles	0%	0.6%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.3%	0%	0%	**0.2%**	-	0.2%
Lights	197	156	0	230	**583**	-	151	2361	1	46	**2559**	-	2781	495	0	**3276**	-	6418
% Lights	98.0%	95.1%	0%	97.5%	**97.0%**	-	95.0%	97.0%	100%	97.9%	**96.9%**	-	97.0%	99.2%	0%	**97.3%**	-	97.1%
Heavy	4	7	0	6	**17**	-	8	69	0	1	**78**	-	79	4	0	**83**	-	178
% Heavy	2.0%	4.3%	0%	2.5%	**2.8%**	-	5.0%	2.8%	0%	2.1%	**3.0%**	-	2.8%	0.8%	0%	**2.5%**	-	2.7%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

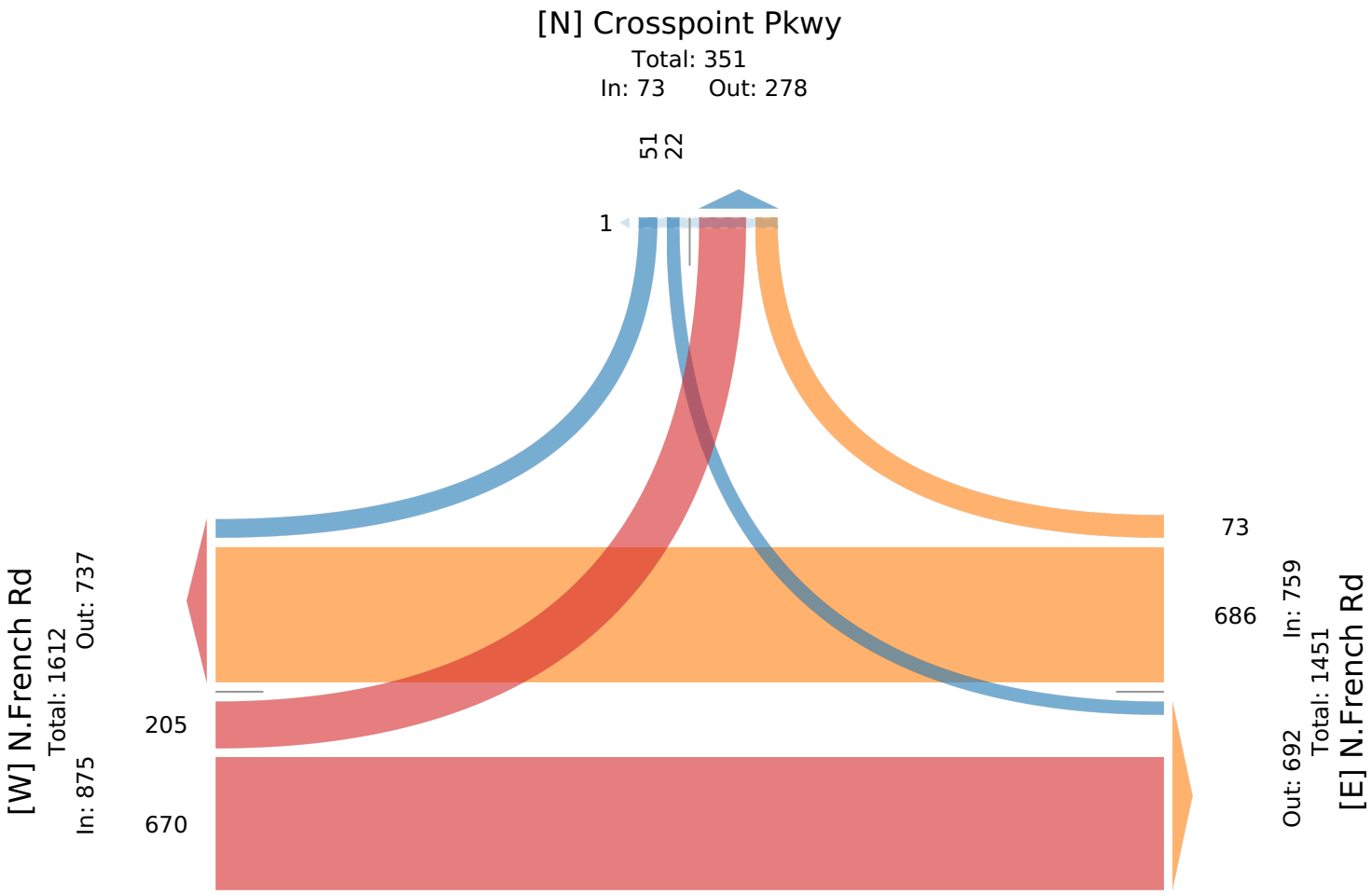
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 7:15AM	5	2	0	5	**12**	0	13	192	0	1	**206**	0	182	24	0	**206**	0	**424**
7:30AM	10	8	0	3	**21**	0	9	177	0	3	**189**	0	179	44	0	**223**	0	**433**
7:45AM	12	8	0	3	**23**	1	18	187	0	6	**211**	0	171	76	0	**247**	0	**481**
8:00AM	8	4	0	5	**17**	0	19	130	0	4	**153**	0	138	61	0	**199**	0	**369**
Total	35	22	0	16	**73**	1	59	686	0	14	**759**	0	670	205	0	**875**	0	**1707**
% Approach	47.9%	30.1%	0%	21.9%	**-**	-	7.8%	90.4%	0%	1.8%	**-**	-	76.6%	23.4%	0%	**-**	-	-
% Total	2.1%	1.3%	0%	0.9%	**4.3%**	-	3.5%	40.2%	0%	0.8%	**44.5%**	-	39.3%	12.0%	0%	**51.3%**	-	-
PHF	0.729	0.688	-	0.800	**0.793**	-	0.776	0.893	-	0.583	**0.899**	-	0.920	0.674	-	**0.886**	-	0.887
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.1%	0%	0%	**0.1%**	-	0.2%
Lights	33	20	0	16	**69**	-	57	661	0	14	**732**	-	646	204	0	**850**	-	1651
% Lights	94.3%	90.9%	0%	100%	**94.5%**	-	96.6%	96.4%	0%	100%	**96.4%**	-	96.4%	99.5%	0%	**97.1%**	-	96.7%
Heavy	2	2	0	0	**4**	-	2	23	0	0	**25**	-	23	1	0	**24**	-	53
% Heavy	5.7%	9.1%	0%	0%	**5.5%**	-	3.4%	3.4%	0%	0%	**3.3%**	-	3.4%	0.5%	0%	**2.7%**	-	3.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

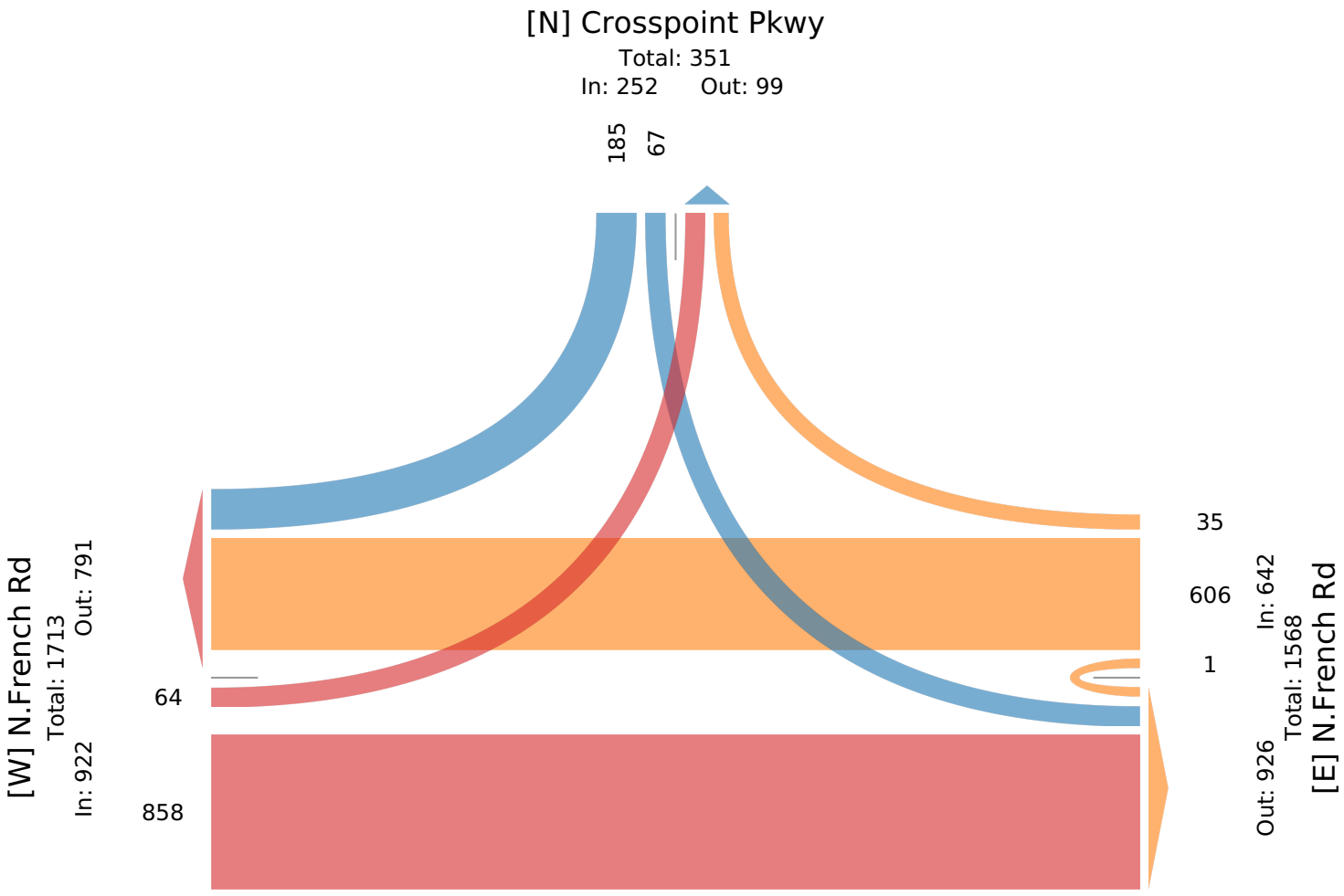
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 4:30PM	33	23	0	34	**90**	0	3	157	1	0	**161**	0	200	23	0	**223**	0	**474**
4:45PM	8	10	0	26	**44**	0	6	136	0	1	**143**	0	218	16	0	**234**	0	**421**
5:00PM	38	19	0	15	**72**	0	9	164	0	6	**179**	0	221	9	0	**230**	0	**481**
5:15PM	14	15	0	17	**46**	0	7	149	0	3	**159**	0	219	16	0	**235**	0	**440**
Total	93	67	0	92	**252**	0	25	606	1	10	**642**	0	858	64	0	**922**	0	**1816**
% Approach	36.9%	26.6%	0%	36.5%	**-**	-	3.9%	94.4%	0.2%	1.6%	**-**	-	93.1%	6.9%	0%	**-**	-	-
% Total	5.1%	3.7%	0%	5.1%	**13.9%**	-	1.4%	33.4%	0.1%	0.6%	**35.4%**	-	47.2%	3.5%	0%	**50.8%**	-	-
PHF	0.612	0.728	-	0.676	**0.700**	-	0.694	0.924	0.250	0.417	**0.897**	-	0.971	0.696	-	**0.981**	-	0.944
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	4	0	0	**4**	-	6
% Motorcycles	0%	1.5%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.5%	0%	0%	**0.4%**	-	0.3%
Lights	92	64	0	90	**246**	-	24	598	1	10	**633**	-	839	64	0	**903**	-	1782
% Lights	98.9%	95.5%	0%	97.8%	**97.6%**	-	96.0%	98.7%	100%	100%	**98.6%**	-	97.8%	100%	0%	**97.9%**	-	98.1%
Heavy	1	2	0	2	**5**	-	1	7	0	0	**8**	-	15	0	0	**15**	-	28
% Heavy	1.1%	3.0%	0%	2.2%	**2.0%**	-	4.0%	1.2%	0%	0%	**1.2%**	-	1.7%	0%	0%	**1.6%**	-	1.5%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



N.French Rd/Crosspoint Pkwy - TMC

Wed Oct 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

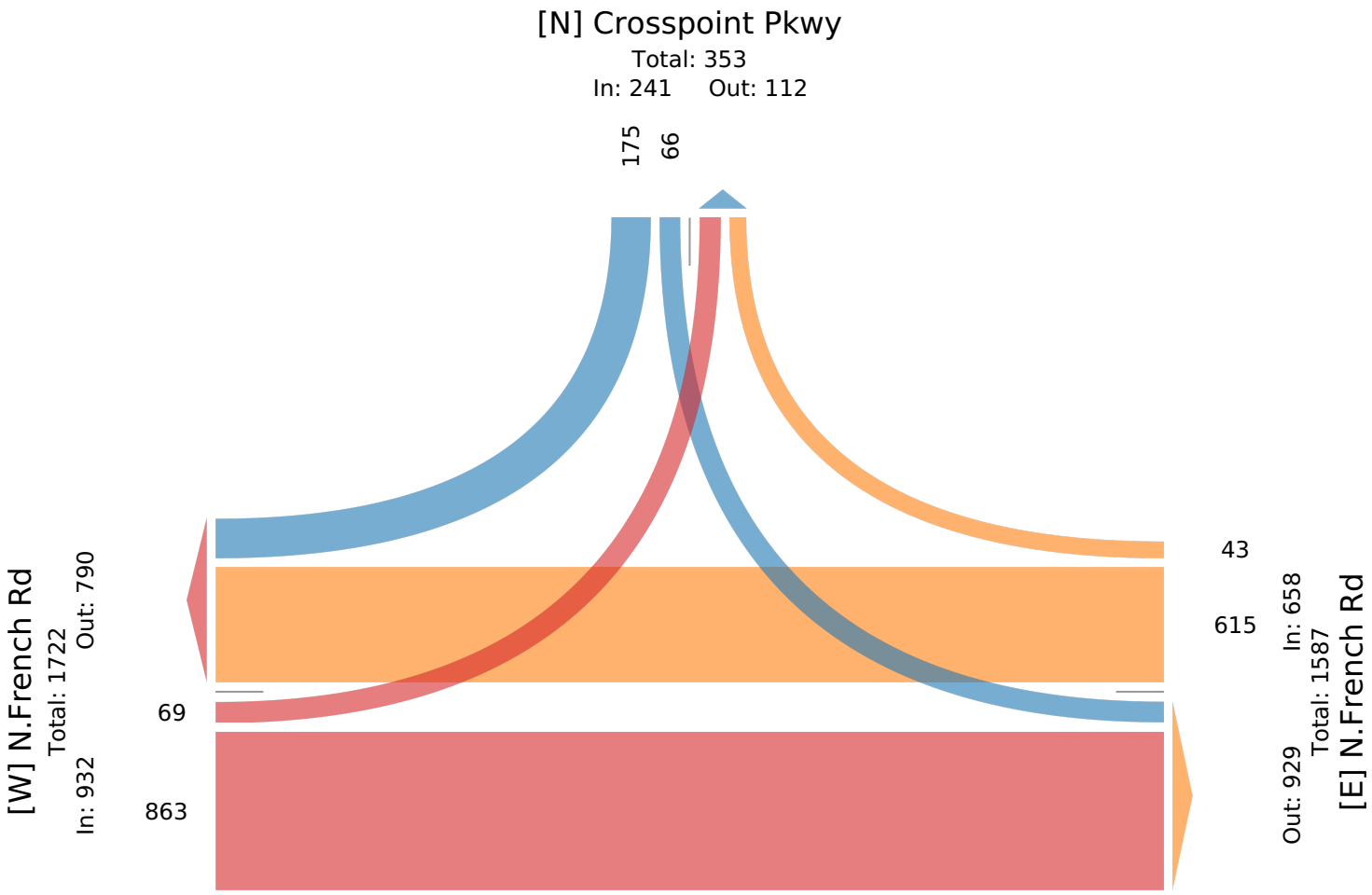
Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US

Leg Direction	Crosspoint Pkwy Southbound						N.French Rd Westbound						N.French Rd Eastbound					
Time	R	L	U	RR	**App**	Ped*	R	T	U	RR	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2021-10-06 4:45PM	8	10	0	26	**44**	0	6	136	0	1	**143**	0	218	16	0	**234**	0	**421**
5:00PM	38	19	0	15	**72**	0	9	164	0	6	**179**	0	221	9	0	**230**	0	**481**
5:15PM	14	15	0	17	**46**	0	7	149	0	3	**159**	0	219	16	0	**235**	0	**440**
5:30PM	24	22	0	33	**79**	0	8	166	0	3	**177**	0	205	28	0	**233**	0	**489**
Total	84	66	0	91	**241**	0	30	615	0	13	**658**	0	863	69	0	**932**	0	**1831**
% Approach	34.9%	27.4%	0%	37.8%	**-**	-	4.6%	93.5%	0%	2.0%	**-**	-	92.6%	7.4%	0%	**-**	-	-
% Total	4.6%	3.6%	0%	5.0%	**13.2%**	-	1.6%	33.6%	0%	0.7%	**35.9%**	-	47.1%	3.8%	0%	**50.9%**	-	-
PHF	0.553	0.750	-	0.689	**0.763**	-	0.833	0.926	-	0.542	**0.919**	-	0.976	0.616	-	**0.991**	-	0.936
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	5	0	0	**5**	-	7
% Motorcycles	0%	1.5%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.6%	0%	0%	**0.5%**	-	0.4%
Lights	84	63	0	91	**238**	-	29	609	0	13	**651**	-	849	69	0	**918**	-	1807
% Lights	100%	95.5%	0%	100%	**98.8%**	-	96.7%	99.0%	0%	100%	**98.9%**	-	98.4%	100%	0%	**98.5%**	-	98.7%
Heavy	0	2	0	0	**2**	-	1	5	0	0	**6**	-	9	0	0	**9**	-	17
% Heavy	0%	3.0%	0%	0%	**0.8%**	-	3.3%	0.8%	0%	0%	**0.9%**	-	1.0%	0%	0%	**1.0%**	-	0.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

N.French Rd/Crosspoint Pkwy - TMC
Wed Oct 6, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 884255, Location: 43.03478, -78.750784

Provided by: Tri-State Traffic Data: New York Division
1016 Hoosick Rd, Troy, NY, 12180, US



APPENDIX B: MISCELLANEOUS CALCULATIONS

PASSERO
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North French Road Mixed Use, Town of Amherst, NY

Documentation of Ambient Traffic Volume Growth

Roadway	Segment starts at	Segment end at	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2023	Annual Growth
N French Rd (CR-299)	I-990	Millersport Hwy			20,611								23,654		1.74%
Miller Rd	Millersport Hwy	N French Rd						617						673	0.97%
														AVERAGE	**1.35%**

PASSERO
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Intersection Crash Rate Calculations

North French Rd Mixed Use

Intersection #1: N Forest Rd at I-990 SB Ramps
Date of Count: Tuesday, July 26, 2022

Number of Crashes: 7
Number of Injuries: 1
Number of Fatalities: 0
Entering Vehicles (PM): 2172
ADT: 22863
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: 3 Legged
Area Type: Urban
Control Type: Sign 1-3 Lanes

$$\text{crash rate} = \frac{\text{Number of Crashes x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{crash rate} = \frac{7 \times 1{,}000{,}000}{22863 \times 365 \times 5}$$

	Crash Rate		Fatality Rate	Injury Rate
Study Intersection	**0.17**	**cr/mve**	**0%**	**14%**
Statewide Average*	**0.19**	**cr/mve**		

ADT = Average Daily Total vehicles entering intersection
cr/mve = crashes per million entering vehicles
* Most recent available 2019 Average Crash Rates for State Highways by Facility Type

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn						0
Rear-end			2			2
Overtaking						0
Right Angle			1			1
Right Turn						0
Head On						0
Side-swipe				3		3
Fixed Object		1				1
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	0	1	3	3	0	7

PDO	6
Injury	1
Injury + PDO	
Fatal	
NR	
Total	7

Intersection Crash Rate Calculations

North French Rd Mixed Use

Intersection #2: N Forest Rd at I-990 NB Ramps
Date of Count: Tuesday, July 26, 2022

Number of Crashes: 14
Number of Injuries: 5
Number of Fatalities: 0
Entering Vehicles (AM): 2396
ADT: 25221
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: 3 Legged
Area Type: Urban
Control Type: Signal 1-4 Lanes

$$\text{crash rate} = \frac{\text{Number of Crashes x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{crash rate} = \frac{14 \times 1{,}000{,}000}{25221 \times 365 \times 5}$$

	Crash Rate		Fatality Rate	Injury Rate
Study Intersection	**0.30**	**cr/mve**	**0%**	**36%**
Statewide Average*	**0.32**	**cr/mve**		

ADT = Average Daily Total vehicles entering intersection
cr/mve = crashes per million entering vehicles
* Most recent available 2019 Average Crash Rates for State Highways by Facility Type

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn	1					1
Rear-end	5		1	3		9
Overtaking						0
Right Angle	2					2
Right Turn	1					1
Head On						0
Side-swipe						0
Fixed Object						0
Backing						0
Other	1					1
Bike/Ped						0
Animal						0
Totals	10	0	1	3	0	14

PDO	9
Injury	5
Injury + PDO	
Fatal	
NR	
Total	14

PASSERO
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Intersection Crash Rate Calculations

North French Rd Mixed Use

Intersection #5: N Forest Rd at Miller Rd
Date of Count: Tuesday, July 11, 2023

Number of Crashes: 5
Number of Injuries: 1
Number of Fatalities: 0
Entering Vehicles (PM): 2313
ADT: 24347
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: 4 Legged
Area Type: Urban
Control Type: Sign 1-3 Lanes

$$\text{crash rate} = \frac{\text{Number of Crashes x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{crash rate} = \frac{5 \times 1{,}000{,}000}{24347 \times 365 \times 5}$$

	Crash Rate		Fatality Rate	Injury Rate
Study Intersection	**0.11**	**cr/mve**	**0%**	**20%**
Statewide Average*	**0.31**	**cr/mve**		

ADT = Average Daily Total vehicles entering intersection
cr/mve = crashes per million entering vehicles
* Most recent available 2019 Average Crash Rates for State Highways by Facility Type

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn	2					2
Rear-end			1			1
Overtaking						0
Right Angle	1		1			2
Right Turn						0
Head On						0
Side-swipe						0
Fixed Object						0
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	3	0	2	0	0	5

PDO	4
Injury	1
Injury + PDO	
Fatal	
NR	
Total	5

Intersection Crash Rate Calculations

North French Rd Mixed Use

Intersection #6: N Forest Rd at Crosspoint Pkwy
Date of Count: Wednesday, October 6, 2021

Number of Crashes: 9
Number of Injuries: 3
Number of Fatalities: 0
Entering Vehicles (PM): 1831
ADT: 19274
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: 3 Legged
Area Type: Urban
Control Type: Sign 1-3 Lanes

$$\text{crash rate} = \frac{\text{Number of Crashes x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{crash rate} = \frac{9 \times 1{,}000{,}000}{19274 \times 365 \times 5}$$

	Crash Rate		Fatality Rate	Injury Rate
Study Intersection	**0.26**	**cr/mve**	**0%**	**33%**
Statewide Average*	**0.19**	**cr/mve**		

ADT = Average Daily Total vehicles entering intersection
cr/mve = crashes per million entering vehicles
* Most recent available 2019 Average Crash Rates for State Highways by Facility Type

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn						0
Rear-end		1	1	3		5
Overtaking						0
Right Angle				1		1
Right Turn				1		1
Head On						0
Side-swipe			1	1		2
Fixed Object						0
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	0	1	2	6	0	9

PDO	6
Injury	3
Injury + PDO	
Fatal	
NR	
Total	9

PROJECT: N French Road Residential Development
LOCATION: Town of Amherst, New York
PEAK HOUR: AM Peak RIRO

Figure Number: 3A 3B 4 5B 6B 7B

Num of yrs: 4

LOCATION NUMBER	INTERSECTION DESCRIPTION	Existing Volumes	2023 Existing Volumes	2023 Adjusted Volumes	2027 Bkgd Vol 1.5%	50 Crosspoint	3325 Millersport	2027 Bkgd Volumes	Residential Development				Total Site Trips	Full Build Volumes
									Enter Dist. %	Exit Dist. %	Trips IN 22	Trips OUT 67		
1	N French Road/ I-990 SB Ramps		1											
	SR	51	52	52	55			55						55
	ST													
	SL	1	1	1	1			1						1
	WR													
	WT	449	456	462	490	18	10	518		33%		22	22	540
	WL	385	391	397	421	15	8	444		30%		20	20	464
	NR													
	NT													
	NL													
	ER	397	403	403	428			428						428
	ET	488	495	666	707	5	2	714	33%		7		7	721
	EL													
2	N French Road/ I-990 NB Ramps													
	SR													
	ST													
	SL													
	WR													
	WT	665	675	701	744	33	18	795		63%		42	42	837
	WL													
	NR	521	529	673	714	6	3	723	30%		7		7	730
	NT	1	1	1	1			1						1
	NL	156	158	158	168			168						168
	ER													
	ET	478	485	617	655	5	2	662	33%		7		7	669
	EL	49	50	50	53			53						53
3	N French Road/ Proposed Westerly Driveway													
	SR									45%		30	30	30
	ST													
	SL													
	WR								6%		1		1	1
	WT	701	701	701	744	33	18	795		18%		12	12	807
	WL													
	NR													
	NT													
	NL													
	ER													
	ET	1290	1290	1290	1369	11	5	1385	63%		14		14	1399
	EL													
4	N French Road/ Proposed EasterlyDriveway													
	SR									18%		12	12	12
	ST													
	SL									37%		25	25	25
	WR								31%		7		7	7
	WT	701	701	701	744	33	18	795	6%		1		1	796
	WL													
	NR													
	NT													
	NL													
	ER													
	ET	1290	1290	1290	1369	11	5	1385						1385
	EL								63%		14		14	14
5	N French Road/ Miller Road													
	SR													
	ST													
	SL													
	WR													
	WT	684	684	684	726	33	18	777	36%		8		8	785
	WL	3	3	3	3			3						3
	NR	3	3	3	3			3	1%		0		0	3
	NT													
	NL	17	17	17	18			18						18
	ER	16	16	16	17			17						17
	ET	1274	1274	1274	1352	11	5	1368		37%		25	25	1393
	EL													
6	N French Road/ Corsspoint Parkway		2											
	SR	50	52	52	55	33		88	2%		0		0	88
	ST													
	SL	21	22	22	23	23	1	47						47
	WR	79	81	81	86	7	2	95						95
	WT	613	632	635	674		18	692	34%		8		8	700
	WL													
	NR													
	NT													
	NL													
	ER													
	ET	613	632	928	985		5	990		35%		24	24	1014
	EL	231	238	349	370	11		381		2%		1	1	382

PROJECT: N French Road Residential Development
LOCATION: Town of Amherst, New York
PEAK HOUR: PM Peak RIRO

Figure Number:			3A	3B				4	5B				6B	7B
					Num of yrs									
					4									
LOCATION NUMBER	INTERSECTION DESCRIPTION	Existing Volumes	2023 Existing Volumes	2023 Adjusted Volumes	2027 Bkgd Vol 1.5%	50 Crosspoint	3325 Millersport	2027 Bkgd Volumes	Residential Development				Total Site Trips	Full Build Volumes
									Enter Dist. %	Exit Dist. %	Trips IN 64	Trips OUT 40		
1	N French Road/ I-990 SB Ramps		1											
	SR	43	44	44	47			47						47
	ST													
	SL	4	4	4	4			4						4
	WR													
	WT	840	853	950	1008	13	7	1028		33%		13	13	1041
	WL	529	537	598	635	9	4	648		30%		12	12	660
	NR													
	NT													
	NL													
	ER	209	212	212	225			225						225
	ET	547	555	608	645	18	9	672	33%		21		21	693
	EL													
2	N French Road/ I-990 NB Ramps													
	SR													
	ST													
	SL													
	WR													
	WT	1000	1015	1214	1288	21	11	1320		63%		25	25	1345
	WL													
	NR	489	496	519	551	17	9	577	30%		19		19	596
	NT	1	1	1	1			1						1
	NL	329	334	334	354			354						354
	ER													
	ET	533	541	567	602	18	9	629	33%		21		21	650
	EL	44	45	45	48			48						48
3	N French Road/ Proposed Westerly Driveway													
	SR									45%		18	18	18
	ST													
	SL													
	WR								6%					
	WT		1214	1214	1288	21	11	1320		18%	4	7	4	4
	WL												7	1327
	NR													
	NT													
	NL													
	ER													
	ET		1086	1086	1153	35	18	1206	63%		40		40	1246
	EL													
4	N French Road/ Proposed Easterly Driveway													
	SR									18%		7	7	7
	ST													
	SL									37%		15	15	15
	WR								31%		20		20	20
	WT		1214	1214	1288	21	11	1320	6%		4		4	1324
	WL													
	NR													
	NT													
	NL													
	ER													
	ET		1086	1086	1153	35	18	1206						1206
	EL								63%		40		40	40
5	N French Road/ Miller Road													
	SR													
	ST													
	SL													
	WR													
	WT	1198	1198	1198	1272	21	11	1304	36%		23		23	1327
	WL	10	10	10	11			11						11
	NR	3	3	3	3			3	1%		1		1	4
	NT													
	NL	16	16	16	17			17						17
	ER	35	35	35	37			37						37
	ET	1051	1051	1051	1115	35	18	1168		37%		15	15	1183
	EL													
6	N French Road/ Corsspoint Parkway		2											
	SR	175	180	267	283	21		304	2%		1		1	305
	ST													
	SL	66	68	68	72	14	3	89						89
	WR	43	44	44	47	24	2	73						73
	WT	615	634	941	999		11	1010	34%		22		22	1032
	WL													
	NR													
	NT													
	NL													
	ER													
	ET	863	889	976	1036		18	1054		35%		14	14	1068
	EL	69	71	78	83	35		118		2%		1	1	119

PROJECT DETAILS

Project Name:	N French Update	Type of Project:	
Project No:		City:	
Country:		Built-up Area(Sq.ft):	
Analyst Name:	Amy Dake	Clients Name:	
Date:	8/27/2024	ZIP/Postal Code:	
State/Province:		No. of Scenarios:	2
Analysis Region:			

SCENARIO SUMMARY

Scenarios	Name	No. of Land Uses	Phases of Development	No. of Years to Project Traffic	User Group	Estimated New Vehicle Trips		
						Entry	Exit	Total
Scenario - 1	AM Peak Hour	3	1	0		22	67	89
Scenario - 2	PM Peak Hour	3	1	0		64	40	104

Scenario - 1

Scenario Name: AM Peak Hour
User Group:
Dev. phase: 1
No. of Years to Project Traffic : 0
Analyst Note:
Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method / Rate/Equation	Entry / Split%	Exit / Split%	Total
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	69	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LIN)	8	23	31
Data Source: Trip Generation Manual, 11th Ed					T = 0.52(X) - 5.70	25%	75%	
210 - Single-Family Detached Housing	General Urban/Suburban	Dwelling Units	36	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	7	22	29
Data Source: Trip Generation Manual, 11th Ed					Ln(T) =0.91Ln(X) + 0.12	25%	75%	
220 - Multifamily Housing (Low-Rise) - Not Close	General Urban/Suburban	Dwelling Units	20	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LIN)	7	22	29
Data Source: Trip Generation Manual, 11th Ed					T = 0.31(X) + 22.85	24%	76%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
215 - Single-Family Attached Housing	100	100	1	1	25	75
210 - Single-Family Detached Housing	100	100	1	1	25	75
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	24	76

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
215 - Single-Family Attached Housing	8	23	0	0	8	23
	31		0		31	
210 - Single-Family Detached Housing	7	22	0	0	7	22
	29		0		29	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	7	22	0	0	7	22
	29		0		29	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
215 - Single-Family Attached Housing	8	23	31
210 - Single-Family Detached Housing	7	22	29
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	7	22	29

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	22	67	89
External Vehicle Trips	22	67	89
New Vehicle Trips	22	67	89

Scenario - 2

Scenario Name: PM Peak Hour
User Group:
Dev. phase: 1
No. of Years to Project Traffic : 0
Analyst Note:
Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method Rate/Equation	Entry Split%	Exit Split%	Total
215 - Single-Family Attached Housing	General Urban/Suburban	Dwelling Units	69	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LIN)	22	15	37
Data Source: Trip Generation Manual, 11th Ed					T = 0.60(X) - 3.93	59%	41%	
210 - Single-Family Detached Housing	General Urban/Suburban	Dwelling Units	36	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	24	14	38
Data Source: Trip Generation Manual, 11th Ed					Ln(T) =0.94Ln(X) + 0.27	63%	37%	
220 - Multifamily Housing (Low-Rise) - Not Close	General Urban/Suburban	Dwelling Units	20	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LIN)	18	11	29
Data Source: Trip Generation Manual, 11th Ed					T = 0.43(X) + 20.55	63%	37%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
215 - Single-Family Attached Housing	100	100	1	1	59	41
210 - Single-Family Detached Housing	100	100	1	1	63	37
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	63	37

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
215 - Single-Family Attached Housing	22	15	0	0	22	15
	37		0		37	
210 - Single-Family Detached Housing	24	14	0	0	24	14
	38		0		38	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	18	11	0	0	18	11
	29		0		29	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
215 - Single-Family Attached Housing	22	15	37
210 - Single-Family Detached Housing	24	14	38
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	18	11	29

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	64	40	104
External Vehicle Trips	64	40	104
New Vehicle Trips	64	40	104

Guideline for a major-road left-turn bay on a four lane undivided Road at an unsignalized intersection

N French Rd Proposed Easterly Driveway AM Peak Right in-Right out

INPUT

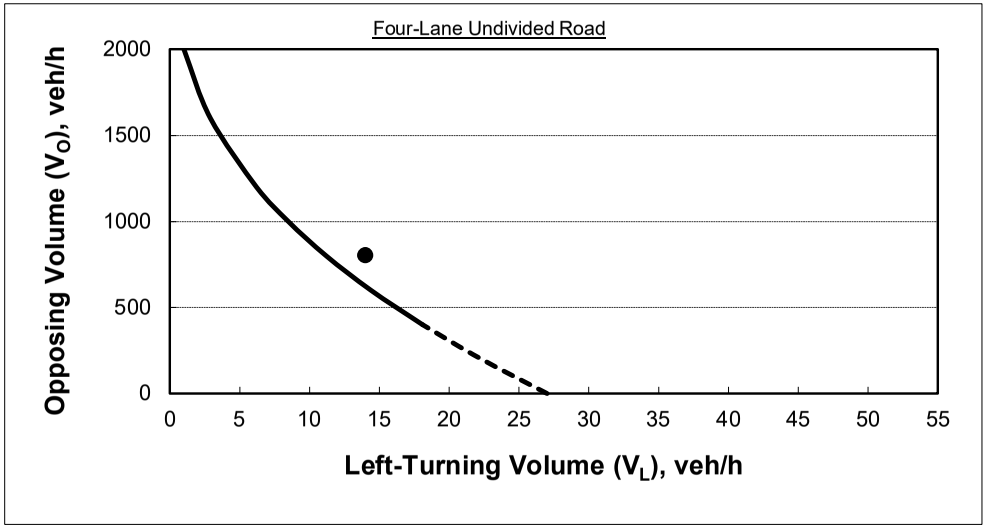
Variable	Value
Left-turning volume (V_L), veh/h:	14
Advancing volume (V_A), veh/h: (Left + Thru + Right)	1399
Opposing volume (V_O), veh/h: (Thru + Right)	803

OUTPUT

Variable	Message
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
LEFT-TURN TREATMENT WARRANTED.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway/Gap, s:	6.0



Note: When V_O < 400 veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h (V_A > 400 veh/h).

Guideline for a major-road left-turn bay on a four lane undivided Road at an unsignalized intersection

N French Rd Proposed Easterly Driveway PM Peak Right in-Right out

INPUT

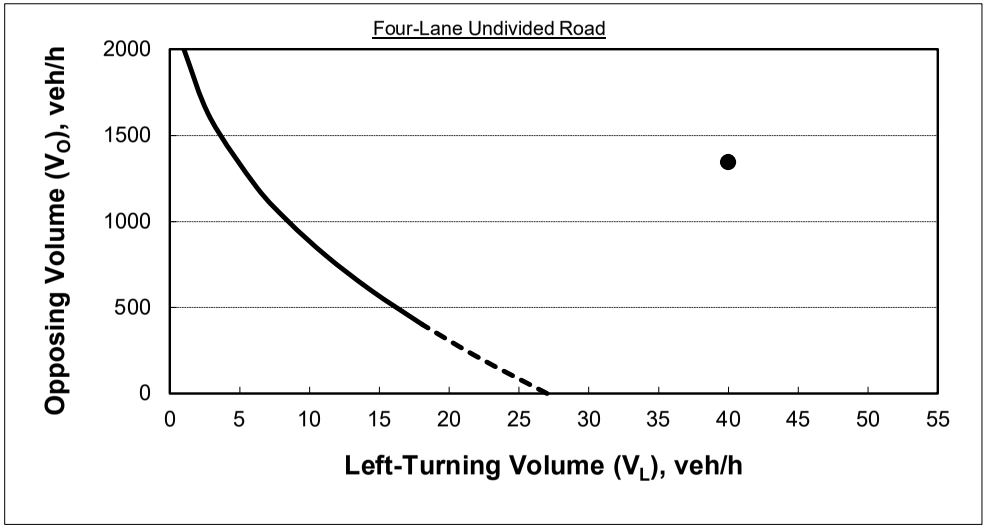
Variable	Value
Left-turning volume (V_L), veh/h:	40
Advancing volume (V_A), veh/h: (Left + Thru + Right)	1246
Opposing volume (V_O), veh/h: (Thru + Right)	1344

OUTPUT

Variable	Message
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
LEFT-TURN TREATMENT WARRANTED.	

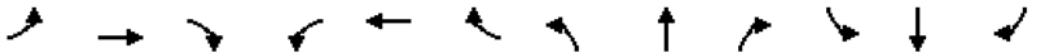
CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway/Gap, s:	6.0



Note: When V_O < 400 veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h (V_A > 400 veh/h).

APPENDIX C: LOS CALCULATIONS – EXISTING CONDITIONS



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	666	403	397	462	0	0	0	0	1	0	52
Future Volume (vph)	0	666	403	397	462	0	0	0	0	1	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.867	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Flt Permitted				0.950							0.999	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			291								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	709	429	422	491	0	0	0	0	1	0	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	709	429	422	491	0	0	0	0	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

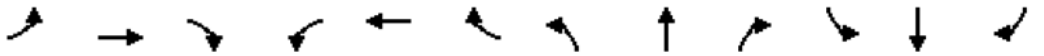
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		81.1	81.1	31.2	125.0						8.9	
Actuated g/C Ratio		0.56	0.56	0.21	0.86						0.06	
v/c Ratio		0.36	0.44	0.58	0.33						0.24	
Control Delay (s/veh)		10.8	4.7	47.9	4.5						2.4	
Queue Delay		0.0	0.0	0.0	0.1						0.0	
Total Delay (s/veh)		10.8	4.7	47.9	4.7						2.4	
LOS		B	A	D	A						A	
Approach Delay (s/veh)		8.5			24.7						2.5	
Approach LOS		A			C						A	
Queue Length 50th (ft)		131	42	203	179						0	
Queue Length 95th (ft)		160	87	263	179						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1978	977	807	1485						232	
Starvation Cap Reductn		0	0	0	368						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.36	0.44	0.52	0.44						0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 145.9			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 15.4		Intersection LOS: B	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: I-990 SB Ramps & N French Rd

Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	617	0	0	701	0	158	1	673	0	0	0
Future Volume (vph)	50	617	0	0	701	0	158	1	673	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3457	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.818					0.950					
Satd. Flow (perm)	0	2839	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								296	296			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			1666			515			456	
Travel Time (s)		6.7			25.2			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	53	656	0	0	746	0	168	1	716	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	709	0	0	746	0	168	359	358	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

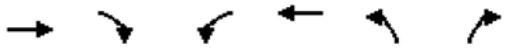
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		94.8			73.9		39.1	39.1	39.1			
Actuated g/C Ratio		0.65			0.51		0.27	0.27	0.27			
v/c Ratio		0.38			0.29		0.40	0.58	0.58			
Control Delay (s/veh)		12.7			13.4		48.4	13.7	13.5			
Queue Delay		0.7			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		13.4			13.4		48.4	13.7	13.5			
LOS		B			B		D	B	B			
Approach Delay (s/veh)		13.4			13.4			20.3				
Approach LOS		B			B			C				
Queue Length 50th (ft)		141			106		139	50	50			
Queue Length 95th (ft)		164			127		216	165	164			
Internal Link Dist (ft)		360			1586			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1910			2667		446	636	636			
Starvation Cap Reductn		807			0		0	0	0			
Spillback Cap Reductn		0			0		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.64			0.28		0.38	0.56	0.56			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 145.9			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 16.0		Intersection LOS: B	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: I-990 NB Ramps & N French Rd

Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1274	16	3	684	17	3
Future Volume (vph)	1274	16	3	684	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.998				0.982	
Flt Protected					0.959	
Satd. Flow (prot)	3530	0	0	3505	1701	0
Flt Permitted					0.959	
Satd. Flow (perm)	3530	0	0	3505	1701	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	1666			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1416	18	3	760	19	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1434	0	0	763	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

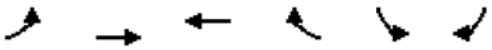
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1274	16	3	684	17	3
Future Vol, veh/h	1274	16	3	684	17	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1416	18	3	760	19	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1433	0	1811	717
Stage 1	-	-	-	-	1424	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	480	-	67	377
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	480	-	66	377
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	639	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.16	71.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	76	-	-	16	-
HCM Lane V/C Ratio	0.294	-	-	0.007	-
HCM Control Delay (s/veh)	71.3	-	-	12.6	0.1
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

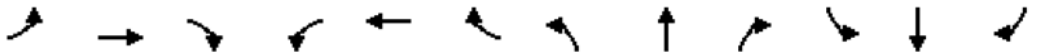


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	349	928	635	81	22	52
Future Volume (vph)	349	928	635	81	22	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				92		62
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		717	
Travel Time (s)		8.5	8.9		16.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	415	1105	756	96	26	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	415	1105	756	96	26	62
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	12.8	39.0	19.3	19.3	6.9	6.9
Actuated g/C Ratio	0.24	0.73	0.36	0.36	0.13	0.13
v/c Ratio	0.49	0.43	0.60	0.15	0.11	0.15
Control Delay (s/veh)	21.2	4.8	17.2	4.5	25.6	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.2	4.8	17.2	4.5	25.6	9.2
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		9.3	15.9		14.1	
Approach LOS		A	B		B	
Queue Length 50th (ft)	59	75	107	1	8	0
Queue Length 95th (ft)	104	105	156	23	27	14
Internal Link Dist (ft)		484	506		637	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	1047	3350	2569	1162	1160	1831
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	0.40	0.33	0.29	0.08	0.02	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 53.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	608	212	598	950	0	0	0	0	4	0	44
Future Volume (vph)	0	608	212	598	950	0	0	0	0	4	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.875	
Flt Protected				0.950							0.996	
Satd. Flow (prot)	0	3574	1538	3433	1881	0	0	0	0	0	1656	0
Flt Permitted				0.950							0.996	
Satd. Flow (perm)	0	3574	1538	3433	1881	0	0	0	0	0	1656	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			236								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	683	238	672	1067	0	0	0	0	4	0	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	238	672	1067	0	0	0	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

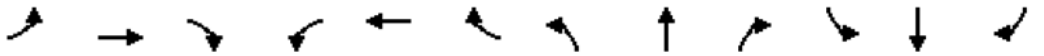
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		86.4	86.4	34.3	133.3						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.87						0.06	
v/c Ratio		0.34	0.24	0.87	0.65						0.22	
Control Delay (s/veh)		10.9	1.6	58.0	7.1						2.2	
Queue Delay		0.0	0.0	3.4	0.7						0.0	
Total Delay (s/veh)		10.9	1.6	61.5	7.9						2.2	
LOS		B	A	E	A						A	
Approach Delay (s/veh)		8.5			28.6						2.3	
Approach LOS		A			C						A	
Queue Length 50th (ft)		124	1	344	221						0	
Queue Length 95th (ft)		150	25	#436	279						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1999	964	764	1626						233	
Starvation Cap Reductn		0	0	44	250						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.34	0.25	0.93	0.78						0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 154			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 21.3		Intersection LOS: C	
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: I-990 SB Ramps & N French Rd

Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	567	0	0	1214	0	334	1	519	0	0	0
Future Volume (vph)	45	567	0	0	1214	0	334	1	519	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.851	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3596	0	0	5136	0	1770	1521	1519	0	0	0
Flt Permitted		0.723					0.950					
Satd. Flow (perm)	0	2610	0	0	5136	0	1770	1521	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								282	282			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			1666			515			456	
Travel Time (s)		6.7			25.2			11.7			10.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	2%	0%	1%	0%	0%	0%
Adj. Flow (vph)	49	616	0	0	1320	0	363	1	564	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	665	0	0	1320	0	363	283	282	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

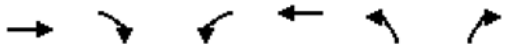
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		100.3			79.6		41.8	41.8	41.8			
Actuated g/C Ratio		0.65			0.52		0.27	0.27	0.27			
v/c Ratio		0.39			0.49		0.75	0.45	0.45			
Control Delay (s/veh)		13.4			20.1		62.9	7.1	7.0			
Queue Delay		0.7			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		14.1			20.1		62.9	7.1	7.0			
LOS		B			C		E	A	A			
Approach Delay (s/veh)		14.2			20.1			29.0				
Approach LOS		B			C			C				
Queue Length 50th (ft)		132			215		340	1	0			
Queue Length 95th (ft)		155			244		467	78	78			
Internal Link Dist (ft)		360			1586			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1717			2689		480	618	617			
Starvation Cap Reductn		681			0		0	0	0			
Spillback Cap Reductn		0			110		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.64			0.51		0.76	0.46	0.46			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 154			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 21.6		Intersection LOS: C	
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: I-990 NB Ramps & N French Rd

Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1051	35	10	1198	16	3
Future Volume (vph)	1051	35	10	1198	16	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.995				0.980	
Flt Protected					0.959	
Satd. Flow (prot)	3558	0	0	3575	1786	0
Flt Permitted					0.959	
Satd. Flow (perm)	3558	0	0	3575	1786	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	1666			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	1106	37	11	1261	17	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1143	0	0	1272	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

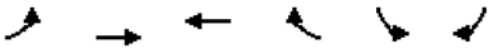
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1051	35	10	1198	16	3
Future Vol, veh/h	1051	35	10	1198	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1106	37	11	1261	17	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1143	0	1776	572
Stage 1	-	-	-	-	1125	-
Stage 2	-	-	-	-	652	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	619	-	75	469
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	619	-	73	469
Mov Cap-2 Maneuver	-	-	-	-	73	-
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	473	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.37	60.17
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	85	-	-	30	-
HCM Lane V/C Ratio	0.236	-	-	0.017	-
HCM Control Delay (s/veh)	60.2	-	-	10.9	0.3
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-



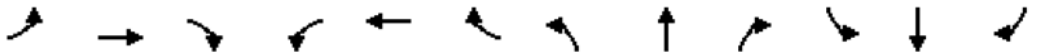
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	78	976	941	44	68	267
Future Volume (vph)	78	976	941	44	68	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3502	3574	3574	1583	1752	2842
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3502	3574	3574	1583	1752	2842
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				34		284
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		717	
Travel Time (s)		8.5	8.9		16.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	1%	2%	3%	0%
Adj. Flow (vph)	83	1038	1001	47	72	284
Shared Lane Traffic (%)						
Lane Group Flow (vph)	83	1038	1001	47	72	284
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	7.4	31.4	22.4	22.4	8.4	8.4
Actuated g/C Ratio	0.14	0.60	0.43	0.43	0.16	0.16
v/c Ratio	0.16	0.48	0.66	0.06	0.25	0.41
Control Delay (s/veh)	24.5	6.5	15.3	5.5	25.2	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.5	6.5	15.3	5.5	25.2	5.8
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		7.9	14.9		9.7	
Approach LOS		A	B		A	
Queue Length 50th (ft)	12	76	132	2	21	0
Queue Length 95th (ft)	34	126	214	18	61	32
Internal Link Dist (ft)		484	506		637	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	1078	3467	2659	1186	1194	2028
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	0.08	0.30	0.38	0.04	0.06	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 52.7			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 11.1		Intersection LOS: B	
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy

APPENDIX D: LOS CALCULATIONS – BACKGROUND CONDITIONS



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	714	428	444	518	0	0	0	0	1	0	55
Future Volume (vph)	0	714	428	444	518	0	0	0	0	1	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.867	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Flt Permitted				0.950							0.999	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			273								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	760	455	472	551	0	0	0	0	1	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	760	455	472	551	0	0	0	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		83.4	83.4	32.9	128.9						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.86						0.06	
v/c Ratio		0.39	0.47	0.63	0.37						0.26	
Control Delay (s/veh)		11.2	5.8	48.7	4.5						2.7	
Queue Delay		0.0	0.0	0.3	0.1						0.0	
Total Delay (s/veh)		11.2	5.8	49.0	4.7						2.7	
LOS		B	A	D	A						A	
Approach Delay (s/veh)		9.2			25.2						2.8	
Approach LOS		A			C						A	
Queue Length 50th (ft)		143	58	232	179						0	
Queue Length 95th (ft)		174	112	294	179						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1952	960	782	1485						229	
Starvation Cap Reductn		0	0	57	299						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.39	0.47	0.65	0.46						0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 149.7			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 16.2		Intersection LOS: B	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: I-990 SB Ramps & N French Rd

Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	662	0	0	795	0	168	1	723	0	0	0
Future Volume (vph)	53	662	0	0	795	0	168	1	723	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3457	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.795					0.950					
Satd. Flow (perm)	0	2760	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								268	268			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			1666			515			456	
Travel Time (s)		6.7			25.2			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	56	704	0	0	846	0	179	1	769	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	760	0	0	846	0	179	386	384	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

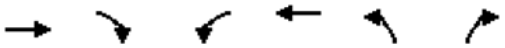
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		97.3			76.5		40.4	40.4	40.4			
Actuated g/C Ratio		0.65			0.51		0.27	0.27	0.27			
v/c Ratio		0.42			0.32		0.42	0.64	0.64			
Control Delay (s/veh)		13.4			14.6		49.7	20.3	20.1			
Queue Delay		0.8			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		14.2			14.6		49.7	20.3	20.1			
LOS		B			B		D	C	C			
Approach Delay (s/veh)		14.3			14.6			25.8				
Approach LOS		B			B			C				
Queue Length 50th (ft)		151			123		151	109	107			
Queue Length 95th (ft)		174			145		230	240	235			
Internal Link Dist (ft)		360			1586			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1846			2669		432	606	606			
Starvation Cap Reductn		726			0		0	0	0			
Spillback Cap Reductn		0			0		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.68			0.32		0.41	0.64	0.63			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 149.7			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 18.7		Intersection LOS: B	
Intersection Capacity Utilization 64.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: I-990 NB Ramps & N French Rd

Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1368	17	3	777	18	3
Future Volume (vph)	1368	17	3	777	18	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.998				0.982	
Flt Protected					0.958	
Satd. Flow (prot)	3530	0	0	3505	1699	0
Flt Permitted					0.958	
Satd. Flow (perm)	3530	0	0	3505	1699	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	1666			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1520	19	3	863	20	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1539	0	0	866	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.4%		ICU Level of Service A	
Analysis Period (min) 15			

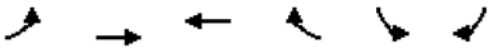
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1368	17	3	777	18	3
Future Vol, veh/h	1368	17	3	777	18	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1520	19	3	863	20	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1539	0	1968	769
Stage 1	-	-	-	-	1529	-
Stage 2	-	-	-	-	438	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	438	-	52	348
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	438	-	52	348
Mov Cap-2 Maneuver	-	-	-	-	52	-
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	600	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.18	101.58
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	59	-	-	14	-
HCM Lane V/C Ratio	0.396	-	-	0.008	-
HCM Control Delay (s/veh)	101.6	-	-	13.3	0.1
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.5	-	-	0	-

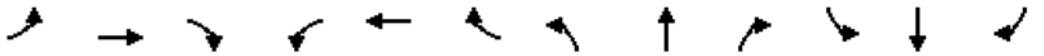


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	381	990	692	95	47	88
Future Volume (vph)	381	990	692	95	47	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				99		105
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		717	
Travel Time (s)		8.5	8.9		16.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	454	1179	824	113	56	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	454	1179	824	113	56	105
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	14.1	42.1	21.0	21.0	8.0	8.0
Actuated g/C Ratio	0.25	0.74	0.37	0.37	0.14	0.14
v/c Ratio	0.53	0.46	0.64	0.17	0.23	0.22
Control Delay (s/veh)	23.3	5.3	18.8	5.2	27.9	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.3	5.3	18.8	5.2	27.9	7.9
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		10.4	17.2		14.9	
Approach LOS		B	B		B	
Queue Length 50th (ft)	73	90	133	3	19	0
Queue Length 95th (ft)	125	132	182	28	49	18
Internal Link Dist (ft)		484	506		637	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	979	3240	2425	1104	1085	1732
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.36	0.34	0.10	0.05	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 57.2			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	663	222	638	1013	0	0	0	0	4	0	46
Future Volume (vph)	0	663	222	638	1013	0	0	0	0	4	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.875	
Flt Protected				0.950							0.996	
Satd. Flow (prot)	0	3574	1538	3433	1881	0	0	0	0	0	1656	0
Flt Permitted				0.950							0.996	
Satd. Flow (perm)	0	3574	1538	3433	1881	0	0	0	0	0	1656	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			233								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	745	249	717	1138	0	0	0	0	4	0	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	745	249	717	1138	0	0	0	0	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		87.3	87.3	34.3	134.2						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.87						0.06	
v/c Ratio		0.36	0.25	0.94	0.69						0.24	
Control Delay (s/veh)		11.1	1.9	65.3	8.1						2.4	
Queue Delay		0.0	0.0	9.8	1.1						0.0	
Total Delay (s/veh)		11.1	1.9	75.1	9.3						2.4	
LOS		B	A	E	A						A	
Approach Delay (s/veh)		8.9			34.8						2.5	
Approach LOS		A			C						A	
Queue Length 50th (ft)		138	5	369	260						0	
Queue Length 95th (ft)		165	30	#478	345						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1987	958	759	1616						232	
Starvation Cap Reductn		0	0	43	249						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.37	0.26	1.00	0.83						0.24	

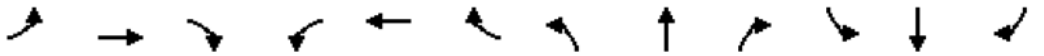
Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 154.9			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 25.3		Intersection LOS: C	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 1: I-990 SB Ramps & N French Rd

Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	620	0	0	1301	0	349	1	569	0	0	0
Future Volume (vph)	47	620	0	0	1301	0	349	1	569	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3596	0	0	5136	0	1770	1519	1519	0	0	0
Flt Permitted		0.707					0.950					
Satd. Flow (perm)	0	2552	0	0	5136	0	1770	1519	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								285	285			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			1666			515			456	
Travel Time (s)		6.7			25.2			11.7			10.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	2%	0%	1%	0%	0%	0%
Adj. Flow (vph)	51	674	0	0	1414	0	379	1	618	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	725	0	0	1414	0	379	310	309	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

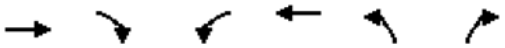
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		101.2			80.5		41.8	41.8	41.8			
Actuated g/C Ratio		0.65			0.52		0.27	0.27	0.27			
v/c Ratio		0.43			0.52		0.79	0.50	0.50			
Control Delay (s/veh)		14.0			21.0		65.9	9.5	9.4			
Queue Delay		0.8			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		14.9			21.1		65.9	9.5	9.4			
LOS		B			C		E	A	A			
Approach Delay (s/veh)		14.9			21.1			31.0				
Approach LOS		B			C			C				
Queue Length 50th (ft)		143			236		359	20	18			
Queue Length 95th (ft)		166			267		#494	110	109			
Internal Link Dist (ft)		360			1586			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1668			2671		477	617	617			
Starvation Cap Reductn		611			0		0	0	0			
Spillback Cap Reductn		0			192		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.69			0.57		0.79	0.50	0.50			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 154.9			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 22.8		Intersection LOS: C	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: I-990 NB Ramps & N French Rd

Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1152	37	10	1285	17	3
Future Volume (vph)	1152	37	10	1285	17	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.995				0.981	
Flt Protected					0.959	
Satd. Flow (prot)	3557	0	0	3575	1787	0
Flt Permitted					0.959	
Satd. Flow (perm)	3557	0	0	3575	1787	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	1666			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	1213	39	11	1353	18	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	0	0	1364	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.5%		ICU Level of Service A	
Analysis Period (min) 15			

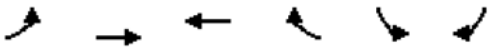
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1152	37	10	1285	17	3
Future Vol, veh/h	1152	37	10	1285	17	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1213	39	11	1353	18	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1252	0	1929	626
Stage 1	-	-	-	-	1232	-
Stage 2	-	-	-	-	697	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	563	-	60	432
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	460	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	563	-	58	432
Mov Cap-2 Maneuver	-	-	-	-	58	-
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	447	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.43	82.62
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	66	-	-	28	-
HCM Lane V/C Ratio	0.317	-	-	0.019	-
HCM Control Delay (s/veh)	82.6	-	-	11.5	0.3
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-



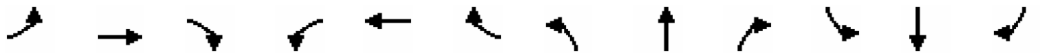
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	117	1039	995	72	88	300
Future Volume (vph)	117	1039	995	72	88	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3502	3574	3574	1583	1752	2842
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3502	3574	3574	1583	1752	2842
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				52		319
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		717	
Travel Time (s)		8.5	8.9		16.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	1%	2%	3%	0%
Adj. Flow (vph)	124	1105	1059	77	94	319
Shared Lane Traffic (%)						
Lane Group Flow (vph)	124	1105	1059	77	94	319
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	8.3	34.7	25.1	25.1	9.5	9.5
Actuated g/C Ratio	0.14	0.61	0.44	0.44	0.17	0.17
v/c Ratio	0.24	0.51	0.67	0.10	0.32	0.43
Control Delay (s/veh)	27.3	6.9	16.3	5.7	28.0	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.3	6.9	16.3	5.7	28.0	5.7
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		9.0	15.6		10.8	
Approach LOS		A	B		B	
Queue Length 50th (ft)	20	90	154	5	30	0
Queue Length 95th (ft)	52	155	254	28	81	35
Internal Link Dist (ft)		484	506		637	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	1005	3339	2500	1123	1123	1937
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	0.12	0.33	0.42	0.07	0.08	0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 57.3			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 12.0		Intersection LOS: B	
Intersection Capacity Utilization 51.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy

APPENDIX E: LOS CALCULATIONS – FULL BUILD CONDITIONS



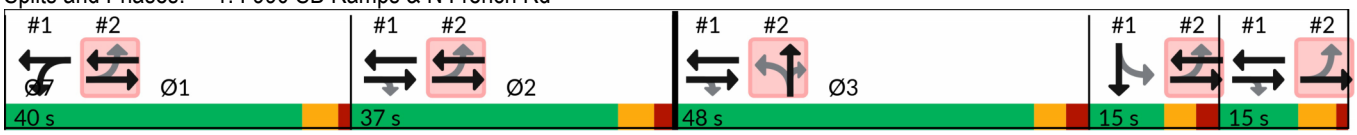
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	721	428	464	540	0	0	0	0	1	0	55
Future Volume (vph)	0	721	428	464	540	0	0	0	0	1	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.867	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Flt Permitted				0.950							0.999	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	767	455	494	574	0	0	0	0	1	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	767	455	494	574	0	0	0	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		84.3	84.3	33.3	130.2						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.86						0.06	
v/c Ratio		0.39	0.47	0.65	0.38						0.26	
Control Delay (s/veh)		11.3	6.0	49.1	4.6						2.7	
Queue Delay		0.0	0.0	0.4	0.2						0.0	
Total Delay (s/veh)		11.3	6.0	49.5	4.8						2.7	
LOS		B	A	D	A						A	
Approach Delay (s/veh)		9.4			25.5						2.8	
Approach LOS		A			C						A	
Queue Length 50th (ft)		145	61	244	179						0	
Queue Length 95th (ft)		176	115	307	179						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1943	953	774	1478						228	
Starvation Cap Reductn		0	0	55	299						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.39	0.48	0.69	0.49						0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 151			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 16.5		Intersection LOS: B	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: I-990 SB Ramps & N French Rd



Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

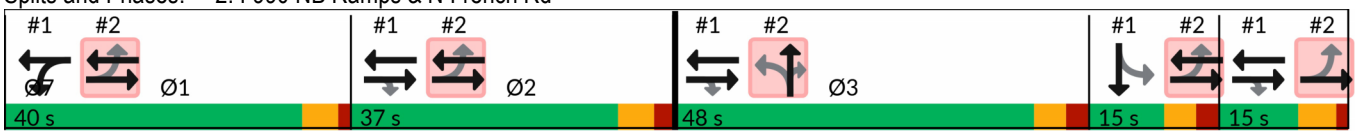
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	669	0	0	837	0	168	1	730	0	0	0
Future Volume (vph)	53	669	0	0	837	0	168	1	730	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3457	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.788					0.950					
Satd. Flow (perm)	0	2735	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								264	264			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			346			515			456	
Travel Time (s)		6.7			5.2			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	56	712	0	0	890	0	179	1	777	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	768	0	0	890	0	179	390	388	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		98.3			77.6		40.7	40.7	40.7			
Actuated g/C Ratio		0.65			0.51		0.27	0.27	0.27			
v/c Ratio		0.43			0.34		0.43	0.66	0.65			
Control Delay (s/veh)		13.5			15.1		50.0	21.4	21.2			
Queue Delay		0.8			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		14.4			15.1		50.0	21.4	21.2			
LOS		B			B		D	C	C			
Approach Delay (s/veh)		14.4			15.1			26.7				
Approach LOS		B			B			C				
Queue Length 50th (ft)		152			131		151	118	116			
Queue Length 95th (ft)		176			154		230	250	248			
Internal Link Dist (ft)		360			266			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1817			2653		428	600	600			
Starvation Cap Reductn		704			0		0	0	0			
Spillback Cap Reductn		0			0		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.69			0.34		0.42	0.65	0.65			

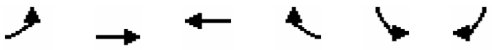
Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 151			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: I-990 NB Ramps & N French Rd



Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1399	807	1	0	30
Future Volume (vph)	0	1399	807	1	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	3343	3505	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	3343	3505	0	0	1644
Link Speed (mph)		45	45		30	
Link Distance (ft)		346	984		610	
Travel Time (s)		7.3	12.9		13.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	3%	0%	0%	0%
Adj. Flow (vph)	0	1521	877	1	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1521	878	0	0	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

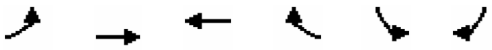
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1399	807	1	0	30
Future Vol, veh/h	0	1399	807	1	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	3	0	0	0
Mvmt Flow	0	1521	877	1	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	439
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	571
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	571
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.68
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	571
HCM Lane V/C Ratio	-	-	-	0.057
HCM Control Delay (s/veh)	-	-	-	11.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	1385	796	7	25	12
Future Volume (vph)	14	1385	796	7	25	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.999			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3345	3502	0	1805	1615
Flt Permitted					0.950	
Satd. Flow (perm)	0	3345	3502	0	1805	1615
Link Speed (mph)		45	45		30	
Link Distance (ft)		984	336		642	
Travel Time (s)		12.9	5.1		14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	3%	0%	0%	0%
Adj. Flow (vph)	15	1505	865	8	27	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1520	873	0	27	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	1385	796	7	25	12
Future Vol, veh/h	14	1385	796	7	25	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	3	0	0	0
Mvmt Flow	15	1505	865	8	27	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	873	0	-	0	1652	436
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	783	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	781	-	-	-	91	573
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	781	-	-	-	88	573
Mov Cap-2 Maneuver	-	-	-	-	88	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.41	0	46.33
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	36	-	-	-	88	573
HCM Lane V/C Ratio	0.019	-	-	-	0.308	0.023
HCM Control Delay (s/veh)	9.7	0.3	-	-	63.1	11.4
HCM Lane LOS	A	A	-	-	F	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1393	17	3	785	18	3
Future Volume (vph)	1393	17	3	785	18	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.998				0.982	
Flt Protected					0.958	
Satd. Flow (prot)	3530	0	0	3505	1699	0
Flt Permitted					0.958	
Satd. Flow (perm)	3530	0	0	3505	1699	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	336			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1548	19	3	872	20	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1567	0	0	875	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

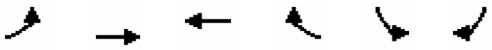
Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1393	17	3	785	18	3
Future Vol, veh/h	1393	17	3	785	18	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1548	19	3	872	20	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1567	0	2000	783
Stage 1	-	-	-	-	1557	-
Stage 2	-	-	-	-	443	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	427	-	50	341
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	427	-	49	341
Mov Cap-2 Maneuver	-	-	-	-	49	-
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	597	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.19	109.14
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	56	-	-	14	-
HCM Lane V/C Ratio	0.417	-	-	0.008	-
HCM Control Delay (s/veh)	109.1	-	-	13.5	0.1
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.6	-	-	0	-

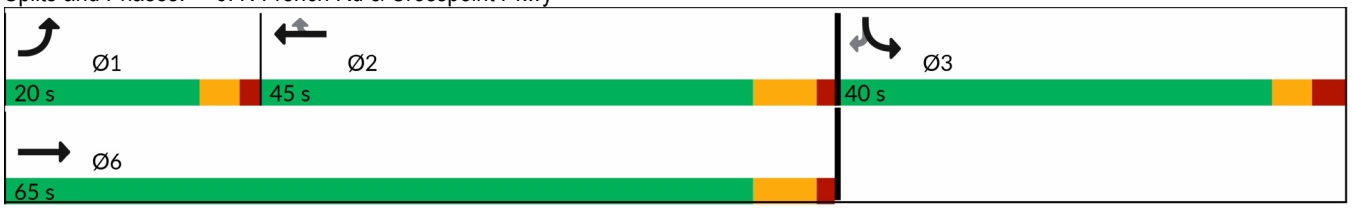


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	382	1014	700	95	47	88
Future Volume (vph)	382	1014	700	95	47	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				98		105
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		610	
Travel Time (s)		8.5	8.9		13.9	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	455	1207	833	113	56	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	455	1207	833	113	56	105
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	14.1	42.3	21.2	21.2	8.0	8.0
Actuated g/C Ratio	0.25	0.74	0.37	0.37	0.14	0.14
v/c Ratio	0.53	0.47	0.64	0.17	0.23	0.22
Control Delay (s/veh)	23.5	5.4	18.8	5.2	28.0	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.5	5.4	18.8	5.2	28.0	7.9
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		10.4	17.3		15.0	
Approach LOS		B	B		B	
Queue Length 50th (ft)	74	94	135	4	19	0
Queue Length 95th (ft)	126	136	184	28	49	18
Internal Link Dist (ft)		484	506		530	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	975	3233	2417	1101	1081	1725
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	0.47	0.37	0.34	0.10	0.05	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 57.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	13	3	481	136	1
Future Volume (vph)	2	13	3	481	136	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.882				0.999	
Flt Protected	0.994					
Satd. Flow (prot)	1633	0	0	3539	3536	0
Flt Permitted	0.994					
Satd. Flow (perm)	1633	0	0	3539	3536	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	544			610	380	
Travel Time (s)	12.4			13.9	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	14	3	523	148	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	526	149	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.4%		ICU Level of Service A	
Analysis Period (min) 15			

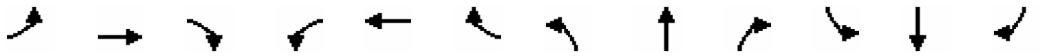
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	13	3	481	136	1
Future Vol, veh/h	2	13	3	481	136	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	14	3	523	148	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	416	74	149	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	564	972	1430	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	563	972	1430	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.14	0.07	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	22	-	886	-	-
HCM Lane V/C Ratio	0.002	-	0.018	-	-
HCM Control Delay (s/veh)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	693	225	660	1041	0	0	0	0	4	0	47
Future Volume (vph)	0	693	225	660	1041	0	0	0	0	4	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.875	
Flt Protected				0.950							0.996	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1569	0
Flt Permitted				0.950							0.996	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	737	239	702	1107	0	0	0	0	4	0	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	737	239	702	1107	0	0	0	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

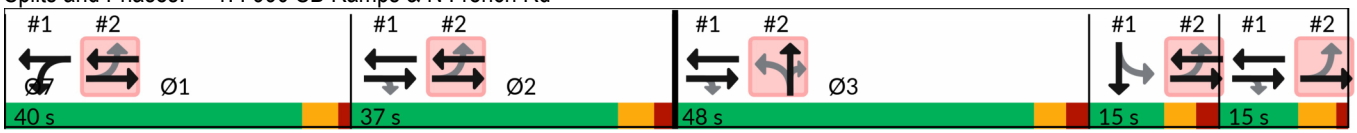
Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		87.4	87.4	34.3	134.3						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.87						0.06	
v/c Ratio		0.37	0.25	0.93	0.74						0.23	
Control Delay (s/veh)		11.2	1.7	61.9	10.3						2.4	
Queue Delay		0.0	0.0	8.3	2.6						0.0	
Total Delay (s/veh)		11.2	1.7	70.3	13.0						2.4	
LOS		B	A	E	B						A	
Approach Delay (s/veh)		8.9			35.3						2.5	
Approach LOS		A			D						A	
Queue Length 50th (ft)		137	1	340	321						0	
Queue Length 95th (ft)		167	27	m#454	m455						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1929	935	752	1471						227	
Starvation Cap Reductn		0	0	43	246						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.38	0.26	0.99	0.90						0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 25.6		Intersection LOS: C	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: I-990 SB Ramps & N French Rd



Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	650	0	0	1345	0	354	1	596	0	0	0
Future Volume (vph)	48	650	0	0	1345	0	354	1	596	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.997					0.950					
Satd. Flow (prot)	0	3461	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.707					0.950					
Satd. Flow (perm)	0	2454	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								276	276			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			480			515			456	
Travel Time (s)		6.7			7.3			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	51	691	0	0	1431	0	377	1	634	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	742	0	0	1431	0	377	318	317	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

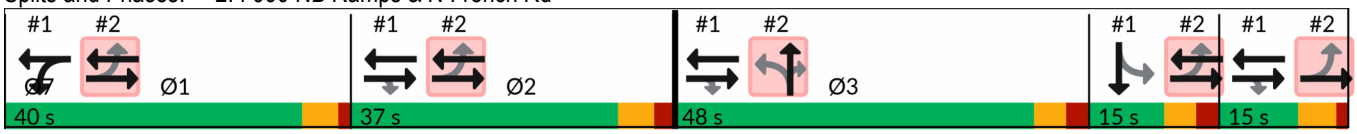
Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		101.3			80.6		41.8	41.8	41.8			
Actuated g/C Ratio		0.65			0.52		0.27	0.27	0.27			
v/c Ratio		0.46			0.54		0.90	0.53	0.52			
Control Delay (s/veh)		15.0			21.5		80.5	11.4	11.3			
Queue Delay		0.9			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		16.0			21.6		80.5	11.4	11.3			
LOS		B			C		F	B	B			
Approach Delay (s/veh)		16.1			21.6			37.2				
Approach LOS		B			C			D				
Queue Length 50th (ft)		147			242		372	33	32			
Queue Length 95th (ft)		172			273		#566	132	131			
Internal Link Dist (ft)		360			400			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1603			2618		416	599	599			
Starvation Cap Reductn		563			0		0	0	0			
Spillback Cap Reductn		0			151		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.71			0.58		0.91	0.53	0.53			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 25.3		Intersection LOS: C	
Intersection Capacity Utilization 79.6%		ICU Level of Service D	
Analysis Period (min) 15			

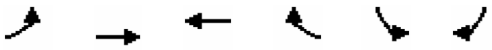
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-990 NB Ramps & N French Rd



Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1246	1327	4	0	18
Future Volume (vph)	0	1246	1327	4	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	3343	3313	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	3343	3313	0	0	1644
Link Speed (mph)		45	45		30	
Link Distance (ft)		480	850		610	
Travel Time (s)		7.3	12.9		13.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	9%	0%	0%	0%
Adj. Flow (vph)	0	1354	1442	4	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1354	1446	0	0	20
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

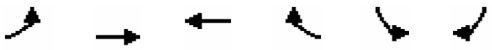
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1246	1327	4	0	18
Future Vol, veh/h	0	1246	1327	4	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	9	0	0	0
Mvmt Flow	0	1354	1442	4	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	723
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	373
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	373
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	15.18
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	373
HCM Lane V/C Ratio	-	-	-	0.052
HCM Control Delay (s/veh)	-	-	-	15.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	1206	1324	20	15	7
Future Volume (vph)	40	1206	1324	20	15	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998			0.850
Flt Protected		0.998			0.950	
Satd. Flow (prot)	0	3344	3309	0	1805	1615
Flt Permitted		0.998			0.950	
Satd. Flow (perm)	0	3344	3309	0	1805	1615
Link Speed (mph)		45	45		30	
Link Distance (ft)		850	336		642	
Travel Time (s)		12.9	5.1		14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	9%	0%	0%	0%
Adj. Flow (vph)	43	1311	1439	22	16	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1354	1461	0	16	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	1206	1324	20	15	7
Future Vol, veh/h	40	1206	1324	20	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	9	0	0	0
Mvmt Flow	43	1311	1439	22	16	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1461	0	-	0	2192	730
Stage 1	-	-	-	-	1450	-
Stage 2	-	-	-	-	742	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	469	-	-	-	40	369
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	437	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	469	-	-	-	34	369
Mov Cap-2 Maneuver	-	-	-	-	34	-
Stage 1	-	-	-	-	158	-
Stage 2	-	-	-	-	437	-

Approach	EB	WB	SB
HCM Control Delay, s/v	2.22	0	132.02
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	116	-	-	-	34	369
HCM Lane V/C Ratio	0.093	-	-	-	0.483	0.021
HCM Control Delay (s/veh)	13.5	1.8	-	-	186.7	15
HCM Lane LOS	B	A	-	-	F	B
HCM 95th %tile Q(veh)	0.3	-	-	-	1.6	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1183	37	11	1327	17	4
Future Volume (vph)	1183	37	11	1327	17	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.995				0.977	
Flt Protected					0.960	
Satd. Flow (prot)	3517	0	0	3506	1698	0
Flt Permitted					0.960	
Satd. Flow (perm)	3517	0	0	3506	1698	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	336			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1314	41	12	1474	19	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1355	0	0	1486	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

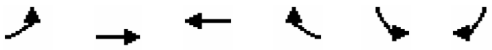
Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1183	37	11	1327	17	4
Future Vol, veh/h	1183	37	11	1327	17	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1314	41	12	1474	19	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1356	0	2097	678
Stage 1	-	-	-	-	1335	-
Stage 2	-	-	-	-	762	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	514	-	43	400
Stage 1	-	-	-	-	203	-
Stage 2	-	-	-	-	411	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	514	-	41	400
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	203	-
Stage 2	-	-	-	-	395	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.58	131.41
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	49	-	-	30	-
HCM Lane V/C Ratio	0.473	-	-	0.024	-
HCM Control Delay (s/veh)	131.4	-	-	12.2	0.5
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.7	-	-	0.1	-

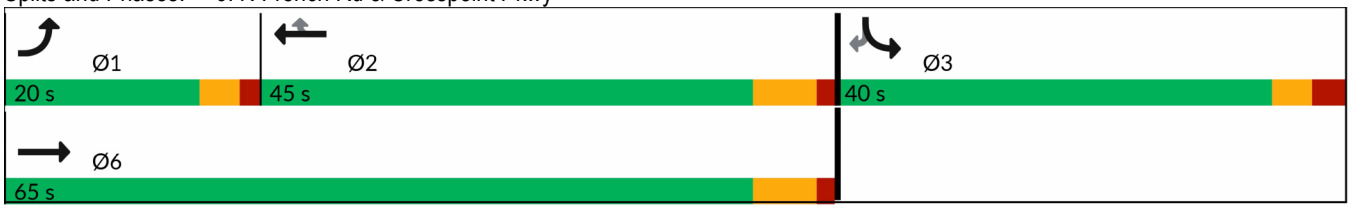


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	119	1068	1032	73	89	305
Future Volume (vph)	119	1068	1032	73	89	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				51		363
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		610	
Travel Time (s)		8.5	8.9		13.9	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	142	1271	1229	87	106	363
Shared Lane Traffic (%)						
Lane Group Flow (vph)	142	1271	1229	87	106	363
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	8.5	46.9	33.6	33.6	10.0	10.0
Actuated g/C Ratio	0.12	0.68	0.48	0.48	0.14	0.14
v/c Ratio	0.33	0.54	0.73	0.11	0.42	0.52
Control Delay (s/veh)	32.1	6.9	17.7	5.9	34.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	6.9	17.7	5.9	34.4	6.5
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		9.5	17.0		12.8	
Approach LOS		A	B		B	
Queue Length 50th (ft)	29	118	204	7	43	0
Queue Length 95th (ft)	56	180	296	29	86	28
Internal Link Dist (ft)		484	506		530	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	778	2912	1965	892	862	1526
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	0.18	0.44	0.63	0.10	0.12	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 69.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 13.1		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	13	8	190	394	3
Future Volume (vph)	2	13	8	190	394	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.882				0.999	
Flt Protected	0.994			0.998		
Satd. Flow (prot)	1666	0	0	3407	3251	0
Flt Permitted	0.994			0.998		
Satd. Flow (perm)	1666	0	0	3407	3251	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	544			610	380	
Travel Time (s)	12.4			13.9	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	6%	11%	0%
Adj. Flow (vph)	2	14	9	207	428	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	216	431	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

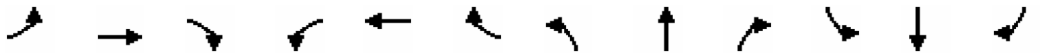
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	13	8	190	394	3
Future Vol, veh/h	2	13	8	190	394	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	6	11	0
Mvmt Flow	2	14	9	207	428	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	551	216	432	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	470	795	1139	-	-	-
Stage 1	630	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	795	1139	-	-	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.07	0.39	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	145	-	727	-	-
HCM Lane V/C Ratio	0.008	-	0.022	-	-
HCM Control Delay (s/veh)	8.2	0.1	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX F: LOS CALCULATIONS – FULL BUILD CONDITIONS WITH MITIGATION



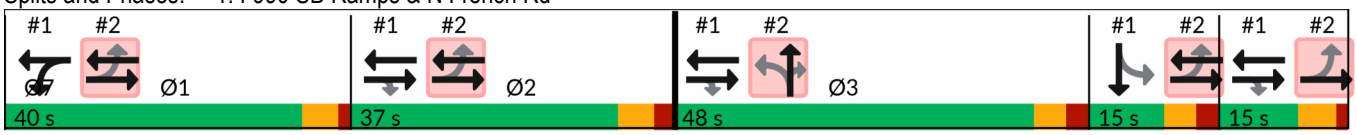
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	721	428	464	540	0	0	0	0	1	0	55
Future Volume (vph)	0	721	428	464	540	0	0	0	0	1	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.867	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Flt Permitted				0.950							0.999	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	767	455	494	574	0	0	0	0	1	0	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	767	455	494	574	0	0	0	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	37.0	48.0	15.0
Total Split (%)	24%	31%	10%
Maximum Green (s)	30.7	41.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		84.3	84.3	33.3	130.2						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.86						0.06	
v/c Ratio		0.39	0.47	0.65	0.38						0.26	
Control Delay (s/veh)		11.3	6.0	49.1	4.6						2.7	
Queue Delay		0.0	0.0	0.4	0.2						0.0	
Total Delay (s/veh)		11.3	6.0	49.5	4.8						2.7	
LOS		B	A	D	A						A	
Approach Delay (s/veh)		9.4			25.5						2.8	
Approach LOS		A			C						A	
Queue Length 50th (ft)		145	61	244	179						0	
Queue Length 95th (ft)		176	115	307	179						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1943	953	774	1478						228	
Starvation Cap Reductn		0	0	55	299						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.39	0.48	0.69	0.49						0.26	

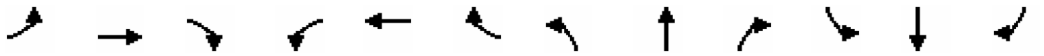
Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 151			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 16.5		Intersection LOS: B	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: I-990 SB Ramps & N French Rd



Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary



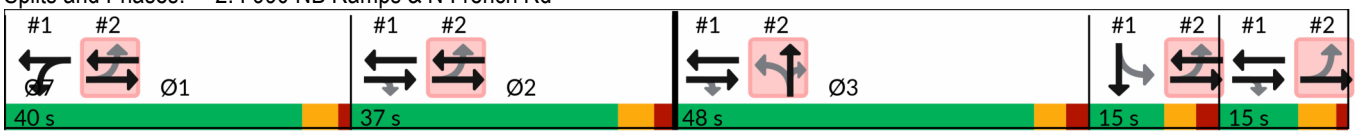
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	669	0	0	837	0	168	1	730	0	0	0
Future Volume (vph)	53	669	0	0	837	0	168	1	730	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.996					0.950					
Satd. Flow (prot)	0	3457	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.788					0.950					
Satd. Flow (perm)	0	2735	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								264	264			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			356			515			456	
Travel Time (s)		6.7			5.4			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	56	712	0	0	890	0	179	1	777	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	768	0	0	890	0	179	390	388	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							48.0	48.0	48.0			
Total Split (%)							31.0%	31.0%	31.0%			
Maximum Green (s)							41.8	41.8	41.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	37.0	15.0	15.0
Total Split (%)	26%	24%	10%	10%
Maximum Green (s)	34.3	30.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		98.3			77.6		40.7	40.7	40.7			
Actuated g/C Ratio		0.65			0.51		0.27	0.27	0.27			
v/c Ratio		0.43			0.34		0.43	0.66	0.65			
Control Delay (s/veh)		13.5			15.1		50.0	21.4	21.2			
Queue Delay		0.8			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		14.4			15.1		50.0	21.4	21.2			
LOS		B			B		D	C	C			
Approach Delay (s/veh)		14.4			15.1			26.7				
Approach LOS		B			B			C				
Queue Length 50th (ft)		152			131		151	118	116			
Queue Length 95th (ft)		176			154		230	250	248			
Internal Link Dist (ft)		360			276			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1817			2653		428	600	600			
Starvation Cap Reductn		704			0		0	0	0			
Spillback Cap Reductn		0			0		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.69			0.34		0.42	0.65	0.65			

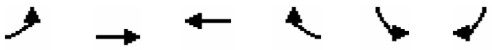
Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 151			
Natural Cycle: 115			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: I-990 NB Ramps & N French Rd



Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1399	807	1	0	30
Future Volume (vph)	0	1399	807	1	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	3343	3505	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	3343	3505	0	0	1644
Link Speed (mph)		45	45		30	
Link Distance (ft)		356	974		610	
Travel Time (s)		7.3	12.9		13.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	3%	0%	0%	0%
Adj. Flow (vph)	0	1521	877	1	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1521	878	0	0	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

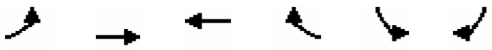
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1399	807	1	0	30
Future Vol, veh/h	0	1399	807	1	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	3	0	0	0
Mvmt Flow	0	1521	877	1	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	439
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	571
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	571
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.68
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	571
HCM Lane V/C Ratio	-	-	-	0.057
HCM Control Delay (s/veh)	-	-	-	11.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	1385	796	7	25	12
Future Volume (vph)	14	1385	796	7	25	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	3343	3502	0	1805	1615
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1805	3343	3502	0	1805	1615
Link Speed (mph)		45	45		30	
Link Distance (ft)		974	336		642	
Travel Time (s)		12.9	5.1		14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	3%	0%	0%	0%
Adj. Flow (vph)	15	1505	865	8	27	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	1505	873	0	27	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	1385	796	7	25	12
Future Vol, veh/h	14	1385	796	7	25	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	3	0	0	0
Mvmt Flow	15	1505	865	8	27	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	873	0	-	0	1652	436
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	783	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	781	-	-	-	91	573
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	781	-	-	-	89	573
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.1	0	19.76
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	781	-	-	-	219	573
HCM Lane V/C Ratio	0.019	-	-	-	0.124	0.023
HCM Control Delay (s/veh)	9.7	-	-	-	23.8	11.4
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1393	17	3	785	18	3
Future Volume (vph)	1393	17	3	785	18	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.998				0.982	
Flt Protected					0.958	
Satd. Flow (prot)	3530	0	0	3505	1699	0
Flt Permitted					0.958	
Satd. Flow (perm)	3530	0	0	3505	1699	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	336			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1548	19	3	872	20	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1567	0	0	875	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

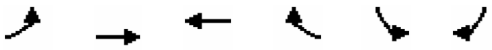
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1393	17	3	785	18	3
Future Vol, veh/h	1393	17	3	785	18	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1548	19	3	872	20	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1567	0	2000	783
Stage 1	-	-	-	-	1557	-
Stage 2	-	-	-	-	443	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	427	-	50	341
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	427	-	49	341
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	597	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.19	36.59
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	137	-	-	14	-
HCM Lane V/C Ratio	0.17	-	-	0.008	-
HCM Control Delay (s/veh)	36.6	-	-	13.5	0.1
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

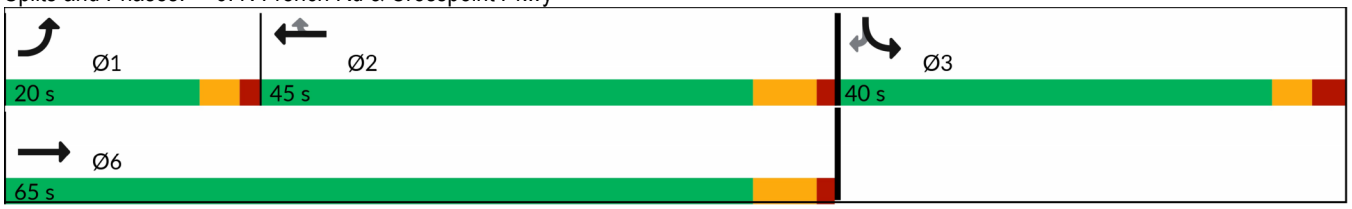


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	382	1014	700	95	47	88
Future Volume (vph)	382	1014	700	95	47	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				98		105
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		610	
Travel Time (s)		8.5	8.9		13.9	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	455	1207	833	113	56	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	455	1207	833	113	56	105
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	14.1	42.3	21.2	21.2	8.0	8.0
Actuated g/C Ratio	0.25	0.74	0.37	0.37	0.14	0.14
v/c Ratio	0.53	0.47	0.64	0.17	0.23	0.22
Control Delay (s/veh)	23.5	5.4	18.8	5.2	28.0	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.5	5.4	18.8	5.2	28.0	7.9
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		10.4	17.3		15.0	
Approach LOS		B	B		B	
Queue Length 50th (ft)	74	94	135	4	19	0
Queue Length 95th (ft)	126	136	184	28	49	18
Internal Link Dist (ft)		484	506		530	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	975	3233	2417	1101	1081	1725
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	0.47	0.37	0.34	0.10	0.05	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 57.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	13	3	481	136	1
Future Volume (vph)	2	13	3	481	136	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.882				0.999	
Flt Protected	0.994					
Satd. Flow (prot)	1633	0	0	3539	3536	0
Flt Permitted	0.994					
Satd. Flow (perm)	1633	0	0	3539	3536	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	544			610	380	
Travel Time (s)	12.4			13.9	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	14	3	523	148	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	526	149	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.4%		ICU Level of Service A	
Analysis Period (min) 15			

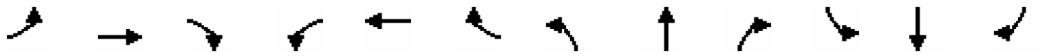
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	13	3	481	136	1
Future Vol, veh/h	2	13	3	481	136	1
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	14	3	523	148	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	416	74	149	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	564	972	1430	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	563	972	1430	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.14	0.07	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	22	-	886	-	-
HCM Lane V/C Ratio	0.002	-	0.018	-	-
HCM Control Delay (s/veh)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	693	225	660	1041	0	0	0	0	4	0	47
Future Volume (vph)	0	693	225	660	1041	0	0	0	0	4	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		300	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850								0.875	
Flt Protected				0.950							0.996	
Satd. Flow (prot)	0	3471	1495	3400	1712	0	0	0	0	0	1569	0
Flt Permitted				0.950							0.996	
Satd. Flow (perm)	0	3471	1495	3400	1712	0	0	0	0	0	1569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234								147	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			440			428			410	
Travel Time (s)		9.3			6.7			9.7			9.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	8%	3%	11%	0%	0%	0%	0%	0%	0%	6%
Adj. Flow (vph)	0	737	239	702	1107	0	0	0	0	4	0	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	737	239	702	1107	0	0	0	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		2 3 7		1	1 2 3 7						4	
Permitted Phases			2 3 7							4		
Detector Phase		2 3 7	2 3 7	1	1 2 3 7					4	4	
Switch Phase												
Minimum Initial (s)				10.0						6.0	6.0	
Minimum Split (s)				15.7						12.2	12.2	
Total Split (s)				40.0						15.0	15.0	
Total Split (%)				25.8%						9.7%	9.7%	
Maximum Green (s)				34.3						8.8	8.8	
Yellow Time (s)				4.3						3.6	3.6	
All-Red Time (s)				1.4						2.6	2.6	
Lost Time Adjust (s)				0.0							0.0	
Total Lost Time (s)				5.7							6.2	
Lead/Lag				Lead						Lag	Lag	
Lead-Lag Optimize?				Yes						Yes	Yes	
Vehicle Extension (s)				3.0						3.0	3.0	
Recall Mode				None						None	None	

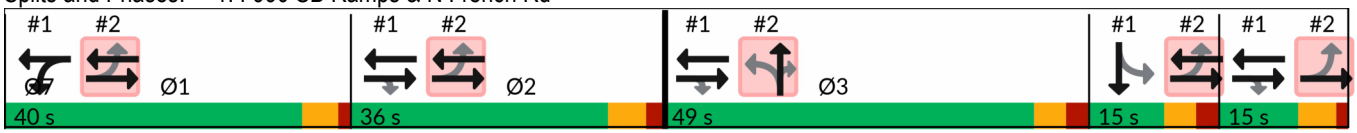
Lane Group	Ø2	Ø3	Ø7
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Turn Type			
Protected Phases	2	3	7
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	6.0	10.0
Minimum Split (s)	45.3	12.2	15.7
Total Split (s)	36.0	49.0	15.0
Total Split (%)	23%	32%	10%
Maximum Green (s)	29.7	42.8	9.3
Yellow Time (s)	4.3	3.6	4.3
All-Red Time (s)	2.0	2.6	1.4
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	2.0	4.0	5.0
Recall Mode	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)		87.4	87.4	34.3	134.3						8.8	
Actuated g/C Ratio		0.56	0.56	0.22	0.87						0.06	
v/c Ratio		0.37	0.25	0.93	0.74						0.23	
Control Delay (s/veh)		11.2	1.7	61.6	10.4						2.4	
Queue Delay		0.0	0.0	8.3	2.5						0.0	
Total Delay (s/veh)		11.2	1.7	70.0	13.0						2.4	
LOS		B	A	E	B						A	
Approach Delay (s/veh)		8.9			35.1						2.5	
Approach LOS		A			D						A	
Queue Length 50th (ft)		137	1	336	328						0	
Queue Length 95th (ft)		167	27	m#458	467						0	
Internal Link Dist (ft)		532			360			348			330	
Turn Bay Length (ft)			300									
Base Capacity (vph)		1957	945	752	1483						227	
Starvation Cap Reductn		0	0	43	251						0	
Spillback Cap Reductn		0	0	0	0						0	
Storage Cap Reductn		0	0	0	0						0	
Reduced v/c Ratio		0.38	0.25	0.99	0.90						0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 25.5		Intersection LOS: C	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			

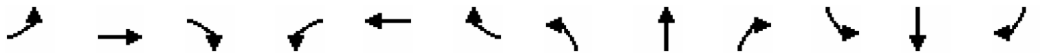
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: I-990 SB Ramps & N French Rd



Lane Group	Ø2	Ø3	Ø7
Walk Time (s)	7.0	7.0	
Flash Dont Walk (s)	32.0	32.0	
Pedestrian Calls (#/hr)	0	0	
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay (s/veh)			
Queue Delay			
Total Delay (s/veh)			
LOS			
Approach Delay (s/veh)			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	650	0	0	1345	0	354	1	596	0	0	0
Future Volume (vph)	48	650	0	0	1345	0	354	1	596	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	250		0	0		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Frt								0.850	0.850			
Flt Protected		0.997					0.950					
Satd. Flow (prot)	0	3461	0	0	5036	0	1543	1475	1475	0	0	0
Flt Permitted		0.707					0.950					
Satd. Flow (perm)	0	2454	0	0	5036	0	1543	1475	1475	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								272	272			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		440			373			515			456	
Travel Time (s)		6.7			5.7			11.7			10.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	0%	0%	3%	0%	17%	0%	4%	0%	0%	0%
Adj. Flow (vph)	51	691	0	0	1431	0	377	1	634	0	0	0
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	0	742	0	0	1431	0	377	318	317	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA	Perm			
Protected Phases		1 2 4 7			1 2 4			3				
Permitted Phases	1 2 4 7						3		3			
Detector Phase	1 2 4 7	1 2 4 7			1 2 4		3	3	3			
Switch Phase												
Minimum Initial (s)							6.0	6.0	6.0			
Minimum Split (s)							12.2	12.2	12.2			
Total Split (s)							49.0	49.0	49.0			
Total Split (%)							31.6%	31.6%	31.6%			
Maximum Green (s)							42.8	42.8	42.8			
Yellow Time (s)							3.6	3.6	3.6			
All-Red Time (s)							2.6	2.6	2.6			
Lost Time Adjust (s)							0.0	0.0	0.0			
Total Lost Time (s)							6.2	6.2	6.2			
Lead/Lag							Lead	Lead	Lead			
Lead-Lag Optimize?							Yes	Yes	Yes			
Vehicle Extension (s)							4.0	4.0	4.0			
Recall Mode							None	None	None			

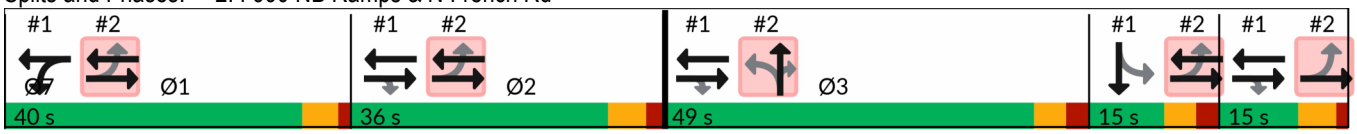
Lane Group	Ø1	Ø2	Ø4	Ø7
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Heavy Vehicles (%)				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Turn Type				
Protected Phases	1	2	4	7
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	10.0	20.0	6.0	10.0
Minimum Split (s)	15.7	45.3	12.2	15.7
Total Split (s)	40.0	36.0	15.0	15.0
Total Split (%)	26%	23%	10%	10%
Maximum Green (s)	34.3	29.7	8.8	9.3
Yellow Time (s)	4.3	4.3	3.6	4.3
All-Red Time (s)	1.4	2.0	2.6	1.4
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	2.0	3.0	5.0
Recall Mode	None	Min	None	None

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)							7.0	7.0	7.0			
Flash Dont Walk (s)							32.0	32.0	32.0			
Pedestrian Calls (#/hr)							0	0	0			
Act Effct Green (s)		100.3			79.6		42.8	42.8	42.8			
Actuated g/C Ratio		0.65			0.51		0.28	0.28	0.28			
v/c Ratio		0.46			0.55		0.88	0.52	0.52			
Control Delay (s/veh)		15.8			22.2		76.5	11.5	11.4			
Queue Delay		1.0			0.0		0.0	0.0	0.0			
Total Delay (s/veh)		16.9			22.3		76.5	11.5	11.4			
LOS		B			C		E	B	B			
Approach Delay (s/veh)		16.9			22.3			35.8				
Approach LOS		B			C			D				
Queue Length 50th (ft)		150			247		368	36	35			
Queue Length 95th (ft)		181			279		#556	135	134			
Internal Link Dist (ft)		360			293			435			376	
Turn Bay Length (ft)												
Base Capacity (vph)		1587			2586		426	604	604			
Starvation Cap Reductn		562			0		0	0	0			
Spillback Cap Reductn		0			146		0	0	0			
Storage Cap Reductn		0			0		0	0	0			
Reduced v/c Ratio		0.72			0.59		0.88	0.53	0.52			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 25.3		Intersection LOS: C	
Intersection Capacity Utilization 79.6%		ICU Level of Service D	
Analysis Period (min) 15			

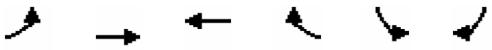
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: I-990 NB Ramps & N French Rd



Lane Group	Ø1	Ø2	Ø4	Ø7
Walk Time (s)		7.0		
Flash Dont Walk (s)		32.0		
Pedestrian Calls (#/hr)		0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay (s/veh)				
Queue Delay				
Total Delay (s/veh)				
LOS				
Approach Delay (s/veh)				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1246	1327	4	0	18
Future Volume (vph)	0	1246	1327	4	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	3343	3313	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	3343	3313	0	0	1644
Link Speed (mph)		45	45		30	
Link Distance (ft)		373	958		610	
Travel Time (s)		7.3	12.9		13.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	9%	0%	0%	0%
Adj. Flow (vph)	0	1354	1442	4	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1354	1446	0	0	20
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

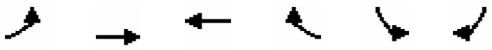
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1246	1327	4	0	18
Future Vol, veh/h	0	1246	1327	4	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	9	0	0	0
Mvmt Flow	0	1354	1442	4	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	723
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	373
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	373
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	15.18
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	373
HCM Lane V/C Ratio	-	-	-	0.052
HCM Control Delay (s/veh)	-	-	-	15.2
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	1206	1324	20	15	7
Future Volume (vph)	40	1206	1324	20	15	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.998			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	3343	3309	0	1805	1615
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1805	3343	3309	0	1805	1615
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	336		642	
Travel Time (s)		12.9	5.1		14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	9%	0%	0%	0%
Adj. Flow (vph)	43	1311	1439	22	16	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	43	1311	1461	0	16	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	1206	1324	20	15	7
Future Vol, veh/h	40	1206	1324	20	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	9	0	0	0
Mvmt Flow	43	1311	1439	22	16	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1461	0	-	0	2192	730
Stage 1	-	-	-	-	1450	-
Stage 2	-	-	-	-	742	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	469	-	-	-	40	369
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	437	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	469	-	-	-	36	369
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	437	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.43	0	31.01
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	469	-	-	-	124	369
HCM Lane V/C Ratio	0.093	-	-	-	0.132	0.021
HCM Control Delay (s/veh)	13.5	-	-	-	38.5	15
HCM Lane LOS	B	-	-	-	E	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1183	37	11	1327	17	4
Future Volume (vph)	1183	37	11	1327	17	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.995				0.977	
Flt Protected					0.960	
Satd. Flow (prot)	3517	0	0	3506	1698	0
Flt Permitted					0.960	
Satd. Flow (perm)	3517	0	0	3506	1698	0
Link Speed (mph)	45			45	35	
Link Distance (ft)	336			564	623	
Travel Time (s)	25.2			8.5	12.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	6%	0%	3%	6%	0%
Adj. Flow (vph)	1314	41	12	1474	19	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1355	0	0	1486	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			

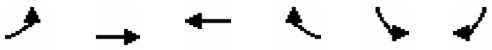
Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1183	37	11	1327	17	4
Future Vol, veh/h	1183	37	11	1327	17	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	6	0	3	6	0
Mvmt Flow	1314	41	12	1474	19	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1356	0	2097	678
Stage 1	-	-	-	-	1335	-
Stage 2	-	-	-	-	762	-
Critical Hdwy	-	-	4.1	-	6.92	6.9
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.3
Pot Cap-1 Maneuver	-	-	514	-	43	400
Stage 1	-	-	-	-	203	-
Stage 2	-	-	-	-	411	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	514	-	41	400
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	203	-
Stage 2	-	-	-	-	395	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.58	31.61
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	158	-	-	30	-
HCM Lane V/C Ratio	0.147	-	-	0.024	-
HCM Control Delay (s/veh)	31.6	-	-	12.2	0.5
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

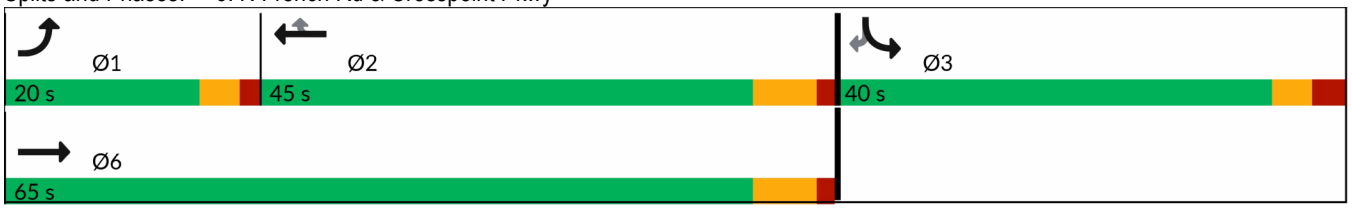


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	119	1068	1032	73	89	305
Future Volume (vph)	119	1068	1032	73	89	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	205			150	0	210
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	3438	3471	1538	1719	2682
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3467	3438	3471	1538	1719	2682
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				51		363
Link Speed (mph)		45	45		30	
Link Distance (ft)		564	586		610	
Travel Time (s)		8.5	8.9		13.9	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	1%	5%	4%	5%	5%	6%
Adj. Flow (vph)	142	1271	1229	87	106	363
Shared Lane Traffic (%)						
Lane Group Flow (vph)	142	1271	1229	87	106	363
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases				2		3
Detector Phase	1	6	2	2	3	3
Switch Phase						
Minimum Initial (s)	6.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	10.7	21.4	21.4	21.4	11.8	11.8
Total Split (s)	20.0	65.0	45.0	45.0	40.0	40.0
Total Split (%)	19.0%	61.9%	42.9%	42.9%	38.1%	38.1%
Maximum Green (s)	15.3	58.6	38.6	38.6	34.2	34.2
Yellow Time (s)	3.2	5.0	5.0	5.0	3.2	3.2
All-Red Time (s)	1.5	1.4	1.4	1.4	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.4	6.4	6.4	5.8	5.8
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Walk Time (s)			7.0	7.0		
Flash Dont Walk (s)			15.0	15.0		
Pedestrian Calls (#/hr)			0	0		
Act Effct Green (s)	8.5	46.9	33.6	33.6	10.0	10.0
Actuated g/C Ratio	0.12	0.68	0.48	0.48	0.14	0.14
v/c Ratio	0.33	0.54	0.73	0.11	0.42	0.52
Control Delay (s/veh)	32.1	6.9	17.7	5.9	34.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	6.9	17.7	5.9	34.4	6.5
LOS	C	A	B	A	C	A
Approach Delay (s/veh)		9.5	17.0		12.8	
Approach LOS		A	B		B	
Queue Length 50th (ft)	29	118	204	7	43	0
Queue Length 95th (ft)	56	180	296	29	86	28
Internal Link Dist (ft)		484	506		530	
Turn Bay Length (ft)	205			150		210
Base Capacity (vph)	778	2912	1965	892	862	1526
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	0.18	0.44	0.63	0.10	0.12	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 69.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 13.1		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: N French Rd & Crosspoint Pkwy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	13	8	190	394	3
Future Volume (vph)	2	13	8	190	394	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.882				0.999	
Flt Protected	0.994			0.998		
Satd. Flow (prot)	1666	0	0	3407	3251	0
Flt Permitted	0.994			0.998		
Satd. Flow (perm)	1666	0	0	3407	3251	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	544			610	380	
Travel Time (s)	12.4			13.9	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	6%	11%	0%
Adj. Flow (vph)	2	14	9	207	428	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	216	431	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	13	8	190	394	3
Future Vol, veh/h	2	13	8	190	394	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	6	11	0
Mvmt Flow	2	14	9	207	428	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	551	216	432	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	470	795	1139	-	-	-
Stage 1	630	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	795	1139	-	-	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.07	0.39	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	145	-	727	-	-
HCM Lane V/C Ratio	0.008	-	0.022	-	-
HCM Control Delay (s/veh)	8.2	0.1	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-