

Traffic Engineering, Transportation Planning & Design

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April 14, 2025

Mr. Himanshu Tripathi
Kushner
30 Columbia Turnpike, FL 3
Florham Park, NJ 07932

(via email: htripathi@kushner.com)

Re: **Traffic Engineering and Air Quality Assessment**
Caspian Pointe – Atlantic City
New Hampshire Avenue and Caspian Avenue
Atlantic City, Atlantic County, NJ
SA Project No. 25057

Dear Hams:

In response to your request, Shropshire Associates LLC has prepared a Traffic Engineering and Air Quality Assessment report to evaluate the impact of the traffic to be generated by the proposed residential development in Atlantic City, Atlantic County, New Jersey.

Based upon the current information provided, the proposal for the construction of 180 multifamily units. The existing properties are currently vacant. Access to the development is proposed via two (2) driveways along northbound New Hampshire Avenue and one (1) driveway along westbound Caspian Avenue.

Existing Conditions

A field reconnaissance was conducted to determine features of the adjacent roadway network, roadways and intersections within the study area. Descriptions of the roadways and intersections within the study area are provided below.

Along the site's frontage, **New Hampshire Avenue** is a four-lane median-divided roadway that is under the jurisdiction of Atlantic City. New Hampshire Avenue is classified an Urban Minor Collector south of its intersection with Caspian Avenue and an Urban Local north of its intersection with Caspian Avenue. New Hampshire Avenue has an approximate cartway width of 68', consisting of four (4) 12' travel lanes and a 20' grass median. The posted speed limit along New Hampshire Avenue is 25 MPH and for the purpose of this assessment, is assumed to extend in a general north-south direction.

Along the site's frontage, **Caspian Avenue** is a two-lane undivided local roadway under the jurisdiction of Atlantic City. Caspian Avenue has an approximate cartway width of 34' and an assumed speed limit of 25 MPH. For the purpose of this assessment, Caspian Avenue is assumed to extend in a general east-west direction.



In the vicinity of the site, **Melrose Avenue** is a two-lane undivided roadway under the jurisdiction of Atlantic City. Melrose Avenue is classified as an Urban Local and has an approximate cartway width of 36'. Melrose Avenue has a posted speed limit of 25 MPH and for the purpose of this assessment, is assumed to extend in a general east-west direction.

In the vicinity of the site, **Parkside Avenue** is a two-lane undivided roadway under the jurisdiction of Atlantic City. Parkside Avenue is classified as an Urban Minor Collector and has an approximate cartway width of 38'. Parkside Avenue has a posted speed limit of 25 MPH and for the purpose of this assessment, is assumed to extend in a general east-west direction.

The four-legged **New Hampshire and Caspian Avenue / Main Sail Way** intersection is controlled by a two-phase traffic signal operating on a 100-second background cycle length. The northbound New Hampshire Avenue approach consists of one (1) dedicated left-turn lane, one (1) dedicated through lane, and a shared through-right turn lane. The southbound New Hampshire Avenue approach consists of shared through/left-turn lane and a shared through/right-turn lane. Both the eastbound Main Sail Way and westbound Caspian Avenue approaches consist of a single shared lane providing for all permitted movements.

The four-legged **New Hampshire and Melrose Avenue** intersection is controlled by a two-phase traffic signal operating on a 100-second background cycle length. Both the northbound and southbound New Hampshire Avenue approaches consist of one (1) dedicated left-turn lane, one (1) dedicated through lane, and a shared through-right turn lane. Both the eastbound and westbound Melrose Avenue approaches consist of a single shared lane providing for all permitted movements.

The T-shaped **New Hampshire Avenue and Parkside Avenue** intersection is stop-controlled along the eastbound Parkside Avenue approach. The northbound New Hampshire Avenue approach consists of one (1) dedicated left-turn lane and two (2) dedicated through lanes. The southbound New Hampshire Avenue approach consists of one (1) dedicated through lane and a shared through/right-turn lane. The eastbound Parkside Avenue approach consists of a single shared lane providing for all permitted movements.

Traffic Count Data

To determine the amount of traffic on the adjacent roadway network, manual turning movement counts (MTMC) were conducted at the study intersections on Tuesday, March 13, 2025, and on Saturday, March 15, 2025. The counts were conducted during the weekday morning (7:00 AM to 9:00 AM), weekday afternoon (2:00 PM to 6:00 PM) and Saturday midday (11:00 AM to 2:00 PM) peak periods. A summary of the traffic counts can be found in the appendix to this assessment and the existing weekday AM, weekday PM, and Saturday midday peak hour volumes are illustrated on Figure 1A.

Due to the data being collected during the off-peak season, a seasonal adjustment was made to the March 2025 collected data by utilizing the New Jersey Department of Transportation Seasonal Correction Factors. A 1.325% growth rate was applied to the collected March 2025 volume data. The seasonally adjusted existing volumes are illustrated on Figure 1B.



Future Conditions

As indicated above, the proposal is to construct a new residential development containing 180 multifamily units. The traffic resulting from the proposed development will not affect the adjacent roadway network until the development is fully built-out, which is anticipated to be by the year 2027.

Based on the *Annual Background Growth Table* prepared by the New Jersey Department of Transportation, a 2.50% annual traffic growth will occur along the adjacent roadway network in the vicinity of the site. By applying the applicable annual growth rates to the existing roadway volumes, the 2027 No-Build volumes were estimated and are illustrated on Figure 2.

Trip Generation

The amount of traffic to be generated by the proposed residential development can best be estimated by using data published by the Institute of Transportation Engineers (ITE). ITE has compiled data from thousands of studies for various land uses, independent variables, and study periods and published the results in *Trip Generation, 11th Edition*. In order to provide a conservative analysis, the proposed use is most similar to ITE Land Use 221: Multifamily Housing (Mid-Rise). Table 1 indicates the weekday AM, weekday PM, and Saturday midday peak hour trips based upon the current ITE trip generation rates, with the trip generation worksheets attached for your review.

Table 1 ITE Trip Generation									
Development	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Multifamily Housing (180 Units)	16	52	68	43	28	71	37	35	72

Trip Distribution

The traffic to be generated by the proposed residential development must be distributed to the adjacent roadway network in a manner in which the residents can reasonably be expected to travel. The site traffic was assigned to the roadway network based on the routes that residents will take to and from the development. The anticipated trip distribution is shown on Figure 3, with the resulting site traffic assignment on Figure 4. The site traffic was then added to the No-Build volumes (Figure 2) to determine the Build volumes, which are illustrated in Figure 5.

Operational Analysis

In order to measure the quality of the traffic flow for the adjacent roadways and intersections, capacity analyses for the study intersections have been completed based upon the methods outlined in the *Highway Capacity Manual*. Capacity analysis is a procedure used to estimate the ability of the roadway network to carry traffic. Capacity analyses are performed based on a Level of Service methodology. Level of Service (LOS) is a qualitative measure that characterizes the operational conditions of a roadway or intersection based on the perceptions by motorists and passengers. Levels of Service are defined for each type of facility (i.e. freeways, highways, signalized intersections, unsignalized intersections). These Levels of



Service range from LOS A to LOS F, with a LOS A representing the best operating conditions and a LOS F representing the worst operating conditions.

The LOS for signalized intersections is classified in terms of delay, which is based on the extent of driver discomfort and frustration, fuel consumption and lost travel time. The delay experienced by a motorist consists of many factors that relate to control, geometrics, and traffic. Some of these factors include the quality of progression, traffic signal cycle length, the green ratio, and the volume-to-capacity ratio. The determination for the LOS for an unsignalized intersection is based upon the average control delay associated with each minor movement (i.e. yielding left-turn movements from the major roads and stop-controlled movements from the minor approaches). The Level of Service criteria for signalized and unsignalized intersections is summarized below in Table 2.

Table 2		
Level of Service Criteria		
Level of Service	Unsignalized Delay (sec)	Signalized Delay (sec)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

In order to assess the traffic impact of the proposed development, the roadway network was evaluated under the Existing, No-Build and Build conditions using the above-described methodology and the latest Synchro software. A detailed description of the study intersections' operations under the three scenarios is provided below, with the resulting Existing, No-Build and Build Levels of Service illustrated on Figures 6, 7, and 8; respectively. The capacity analysis worksheets are attached for reference.

New Hampshire Avenue and Caspian Avenue / Main Sail Way Intersection

Under existing conditions, the New Hampshire Avenue and Caspian Avenue / Main Sail Way signalized intersection will operate at an overall LOS A during all peak hours. All individual movements operate at a LOS C or better during all peak hours.

Under the future No-Build conditions, the New Hampshire Avenue and Caspian Avenue / Main Sail Way signalized intersection will continue to operate at an overall LOS A during all peak hours. All individual movements will continue to operate at existing levels of service during all peak hours.

Under the future Build conditions, the New Hampshire Avenue and Caspian Avenue / Main Sail Way signalized intersection will continue to operate at an overall LOS A during all peak hours. All individual movements will continue to operate at No-Build levels of service, with the exception of the westbound Caspian Avenue approach, which will operate at a LOS B during the weekday PM peak hour.



New Hampshire Avenue and Melrose Avenue Intersection

Under existing conditions, the New Hampshire Avenue and Melrose Avenue signalized intersection will operate at an overall LOS A during all peak hours. All individual movements operate at a LOS C or better during all peak hours.

Under both future No-Build and Build conditions, the New Hampshire Avenue and Melrose Avenue signalized intersection will continue to operate at an overall LOS A during all peak hours. All individual movements will continue to operate at existing levels of service during all peak hours.

New Hampshire Avenue and Parkside Avenue Intersection

Under existing conditions, the eastbound Parkside Avenue stop-controlled approach operates at a LOS A during all peak hours. In addition, the northbound New Hampshire Avenue conflicting left-turn movements operate at a LOS A during all peak hours.

Under the future No-Build conditions, all individual movements at the New Hampshire Avenue and Parkside Avenue stop-controlled intersection will operate at exiting levels of service during all peak hours.

Under the future Build conditions, access to the proposed residential development will be provided via one (1) new driveway along northbound New Hampshire Avenue, opposite Parkside Avenue, creating a four-legged stop-controlled intersection.

Based upon this configuration, all individual movements at the New Hampshire Avenue and Parkside Avenue / site driveway stop-controlled intersection will operate at a LOS A during all peak hours.

Caspian Avenue and Site Driveway Intersection

Under the future Build conditions, access to the proposed residential development will be provided via one (1) new driveway along westbound Caspian Avenue. The proposed driveway will be stop-controlled at its intersection with Caspian Avenue. All approaches will consist of a single shared lane providing for all permitted movements.

Based upon this configuration, all individual movements at the Caspian Avenue and site driveway stop-controlled intersection will operate at a LOS A during all peak hours.

Air Quality Report

NJDEP Protocol

The New Jersey Department of Environmental Protection (NJDEP) outlines an air quality evaluation protocol in *Air Quality Analysis for Intersections*. NJDEP requires dispersion modeling to demonstrate that the National Ambient Air Quality Standards (NAAQS) for carbon monoxide will not be exceeded due to the additional traffic to be generated by a proposed development. As per N.J.A.C. 7:27-13.5, carbon monoxide concentrations shall not exceed 35 ppm for one-hour average concentrations and 9 ppm for eight-hour average concentrations.



Levels of service (LOS) results are the basis for determining whether or not an intersection requires dispersion modeling. Generally, a LOS A, B or C indicates that vehicle delays at an intersection are not significant enough to generate excessive CO concentrations. At signalized intersections, any movement that functions at a LOS D, E or F requires CO dispersion modeling. For unsignalized intersections, a LOS E or F on the stop-controlled approaches, and a LOS D, E or F for the major street left-turn movement indicates the need for CO dispersion modeling.

Data Analysis

The intersections to be analyzed for air quality violations are dependent on the levels of service at each intersection. Based on the levels of service presented in this Traffic Engineering and Air Quality Assessment report and the NJDEP protocol, dispersion modeling is not required for any of the study locations. Therefore, no further improvements are required at the study locations due to air quality conditions.

Conclusion

Based on the traffic analysis and evaluation provided in this traffic engineering assessment report, the traffic resulting from the proposed residential development will have a minimal impact on the adjacent roadway network and can be safely and efficiently accommodated based upon the following conclusions:

- Based upon the ITE trip generation rates, the proposed residential development will generate a total of 68 total trips during the AM peak hour, 71 total trips during the PM peak hour, and 72 total trips during the Saturday midday peak hour.
- Access to the proposed residential development will be provided via one (1) new driveway along northbound New Hampshire Avenue, opposite Parkside Avenue, creating a four-legged stop-controlled intersection. In addition, access will be provided via one (1) new driveway along westbound Caspian Avenue.
- The traffic resulting from the proposed residential development will cause minimal changes in the levels of service at the New Hampshire Avenue and Caspian Avenue / Main Sail Way signalized intersection. Overall, the intersection will continue to operate at LOS A during all peak hours. All individual movements will continue to operate at No-Build levels of service, with the exception of the westbound Caspian Avenue approach, which will operate at a LOS B during the weekday PM peak hour.
- The traffic resulting from the proposed residential development will cause no changes in the levels of service at the New Hampshire Avenue and Melrose Avenue signalized intersection. Overall, the intersection will continue to operate at LOS A during all peak hours. All individual movements will continue to operate at existing levels of service during all peak hours.
- Under the future Build conditions, access to the proposed residential development will be provided via one (1) new driveway along northbound New Hampshire Avenue, opposite Parkside Avenue, creating a four-legged stop-controlled intersection.



Based upon this configuration, all individual movements at the New Hampshire Avenue and Parkside Avenue / site driveway stop-controlled intersection will operate at a LOS A during all peak hours.

- Under the future Build conditions, access to the proposed residential development will be provided via one (1) new driveway along westbound Caspian Avenue. The proposed driveway will be stop-controlled at its intersection with Caspian Avenue. All approaches will consist of a single shared lane providing for all permitted movements.

Based upon this configuration, all individual movements at the Caspian Avenue and site driveway stop-controlled intersection will operate at a LOS A during all peak hours.

- Based on the levels of service presented in this Traffic Engineering and Air Quality Assessment report and the NJDEP protocol, dispersion modeling is not required for any of the study locations. Therefore, no further improvements are required at the study locations due to air quality conditions.

Should you have any questions or require additional information, please feel free to contact us.

**Sincerely,
Shropshire Associates LLC**

A handwritten signature in black ink, appearing to read 'Nathan B. Mosley'.

Nathan B. Mosley, P.E., C.M.E.
Professional Engineer
N.J. License No. 48698

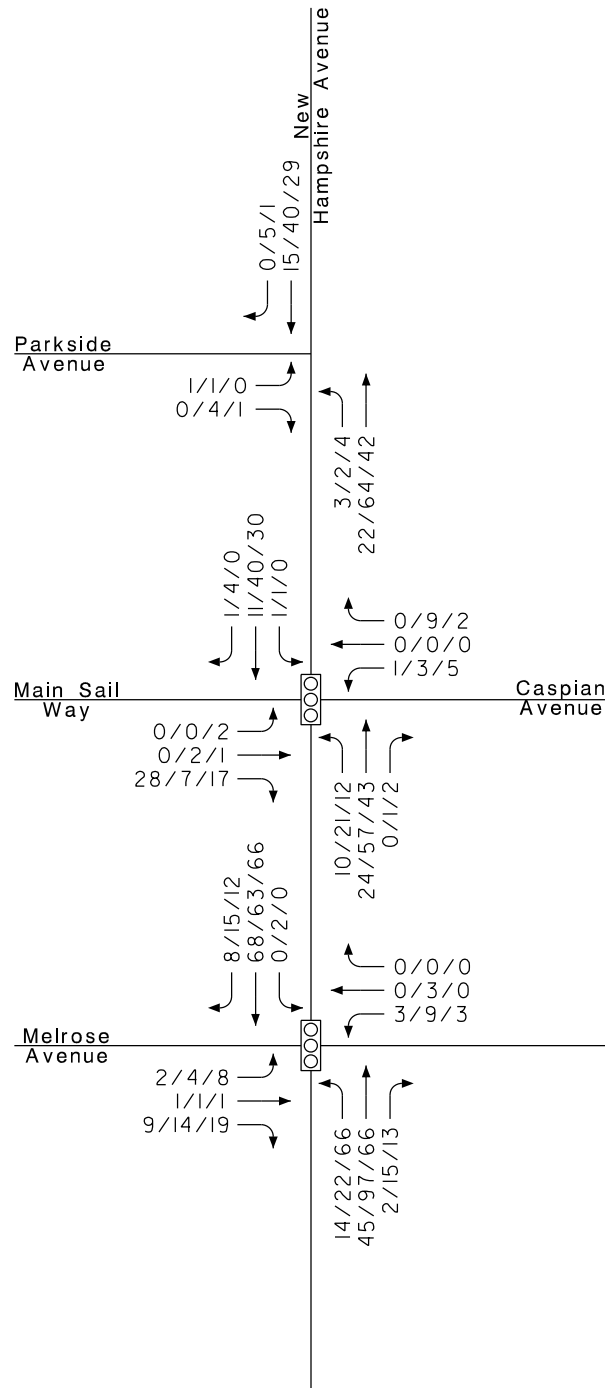
NBM/jab
Attachments

A handwritten signature in black ink, appearing to read 'Christopher R. Campbell'.

Christopher R. Campbell, P.E.
Professional Engineer
N.J. License No. 61090

cc: Jon Barnhart

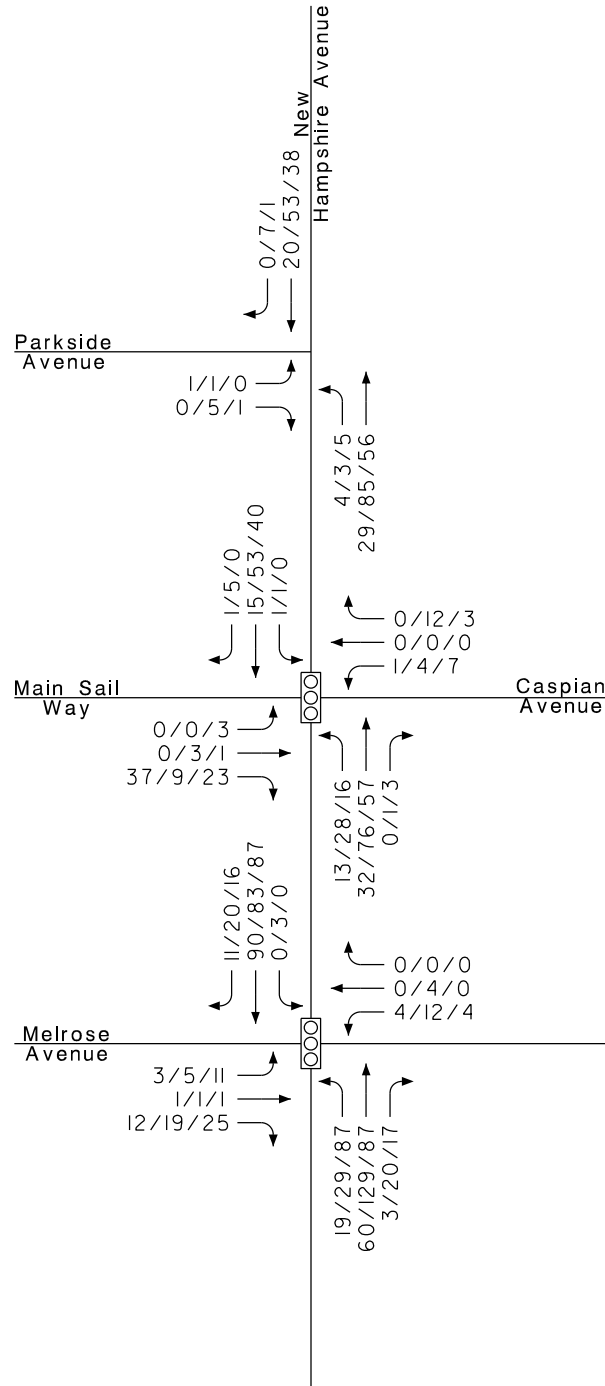
(via email: jbarnhart@aponzio.com)



Caspian Pointe – Atlantic City

Atlantic City, Atlantic County, NJ

April 2025



Caspian Pointe – Atlantic City

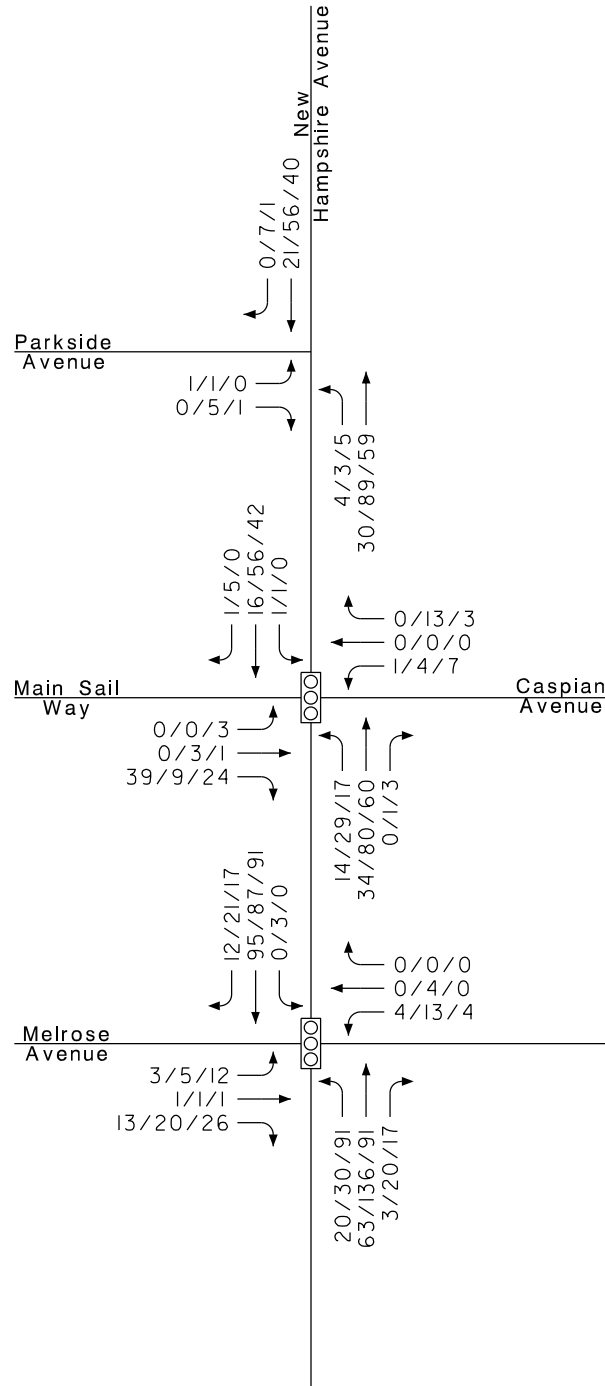
Atlantic City, Atlantic County, NJ

April 2025



TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



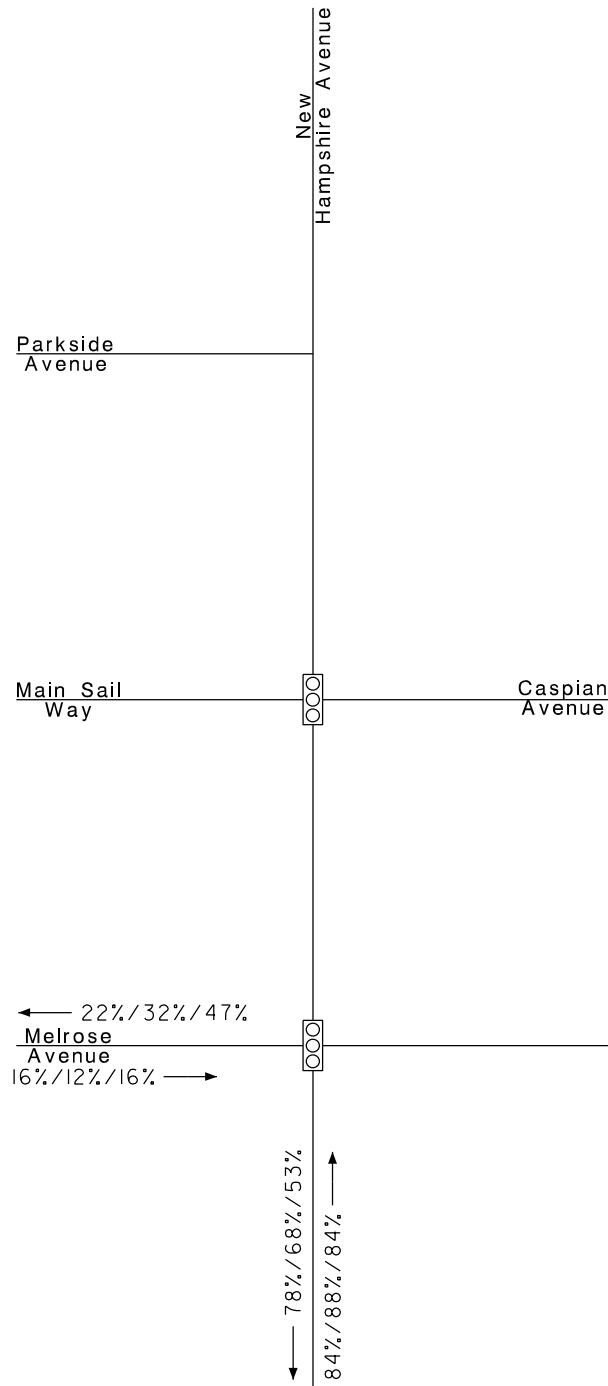
Caspian Pointe – Atlantic City

Atlantic City, Atlantic County, NJ

April 2025

TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



Caspian Pointe – Atlantic City

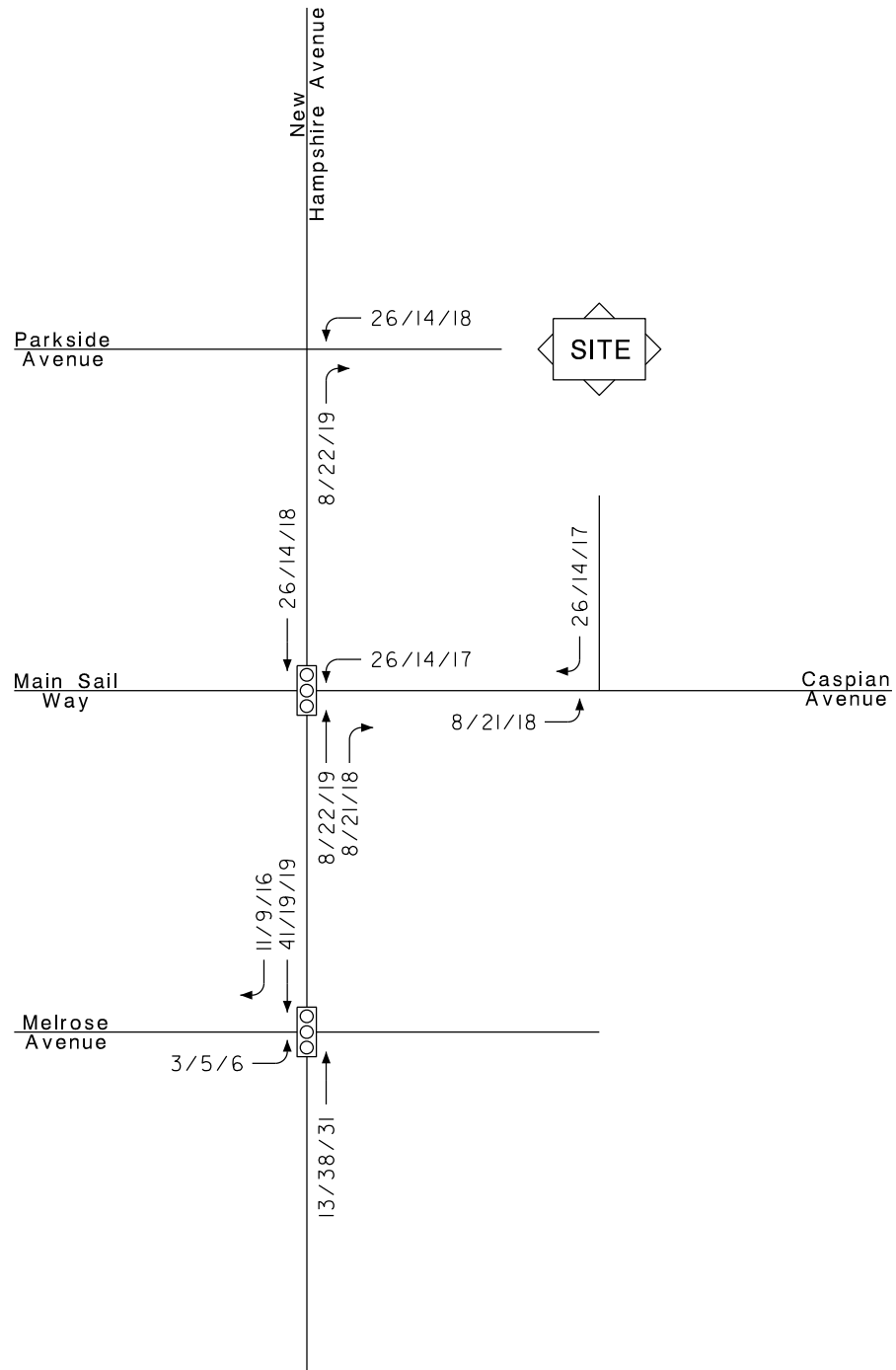
Atlantic City, Atlantic County, NJ

April 2025



TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



Caspian Pointe – Atlantic City

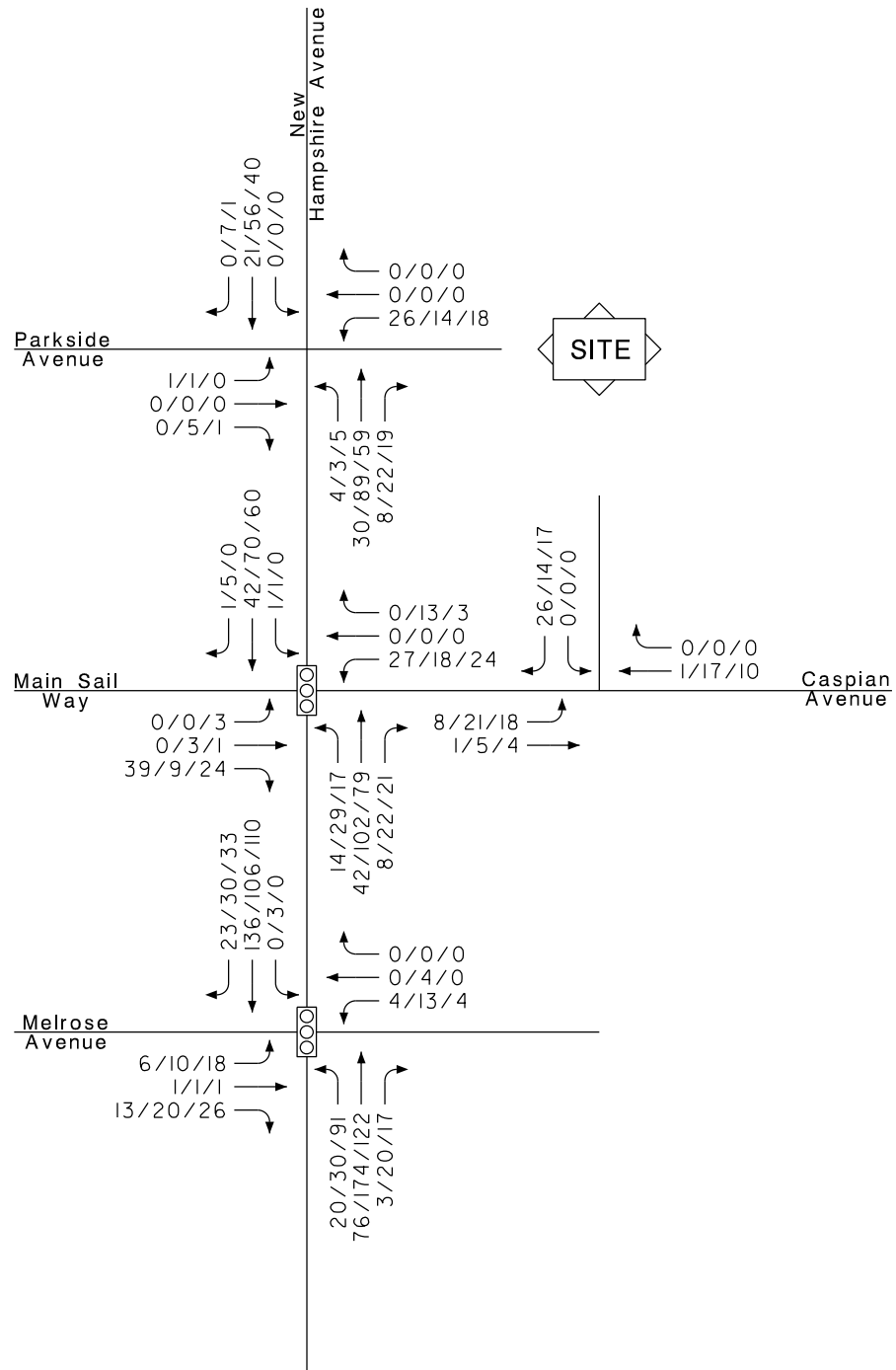
Atlantic City, Atlantic County, NJ

April 2025



TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



Caspian Pointe - Atlantic City

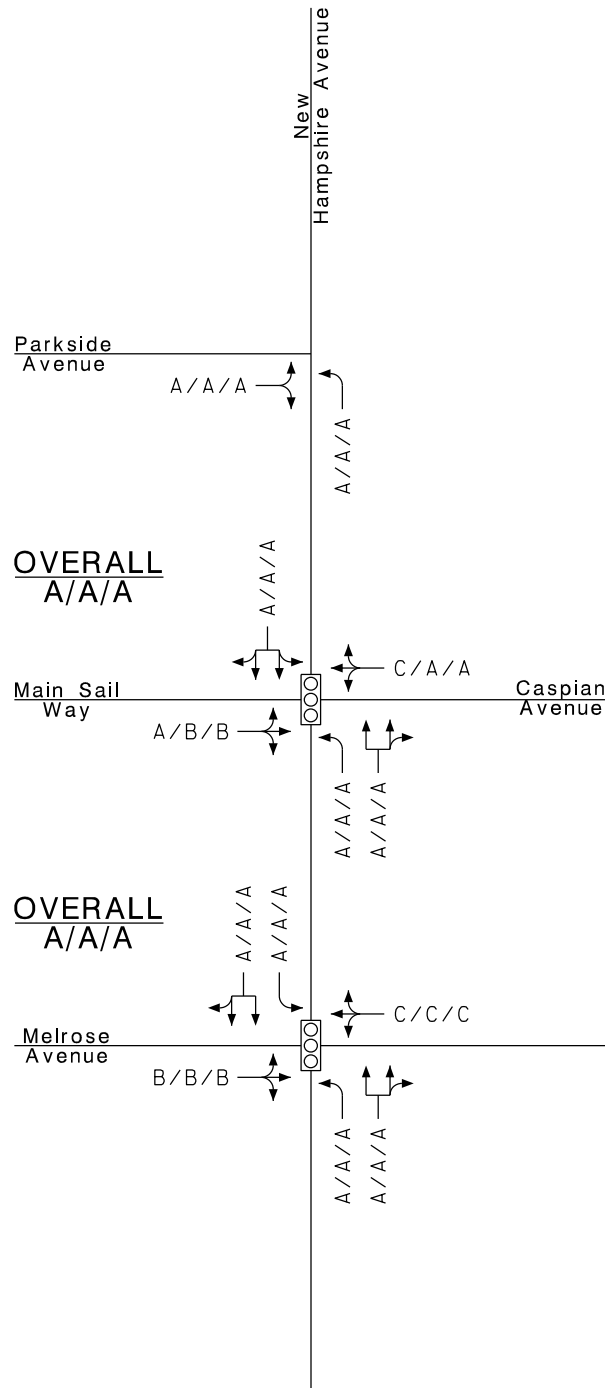
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April 2025



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AM/PM/SAT PEAK HOUR



Caspian Pointe – Atlantic City

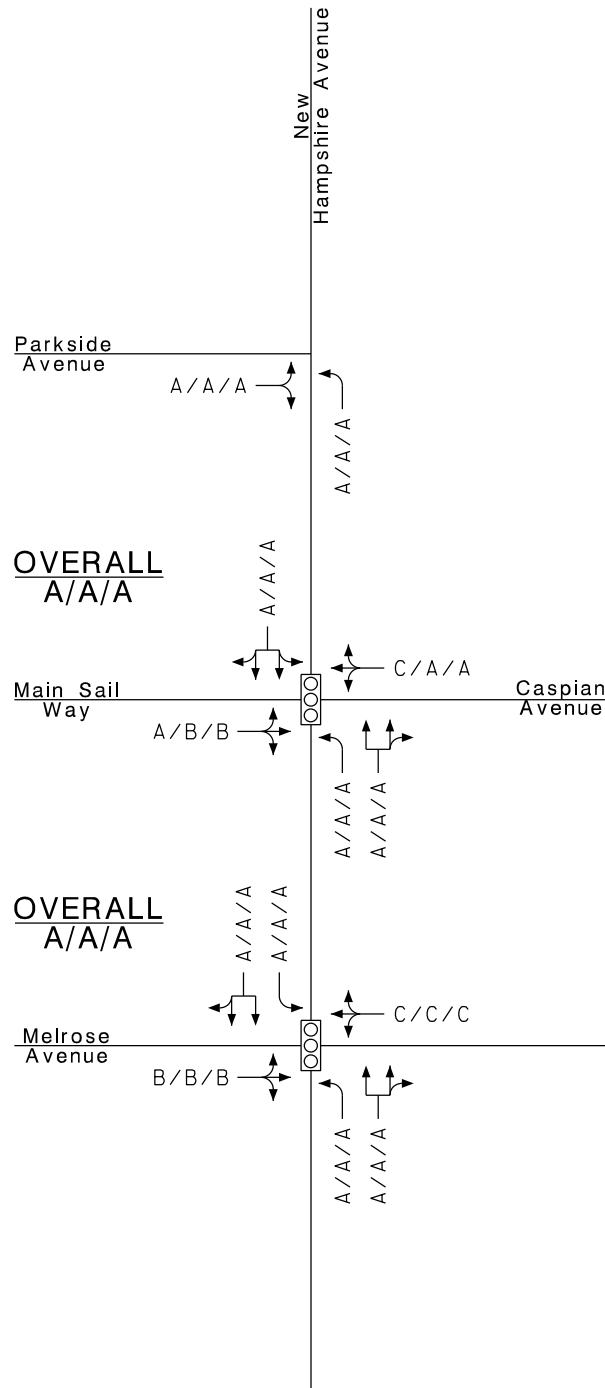
Atlantic City, Atlantic County, NJ

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AM/PM/SAT PEAK HOUR



Caspian Pointe – Atlantic City

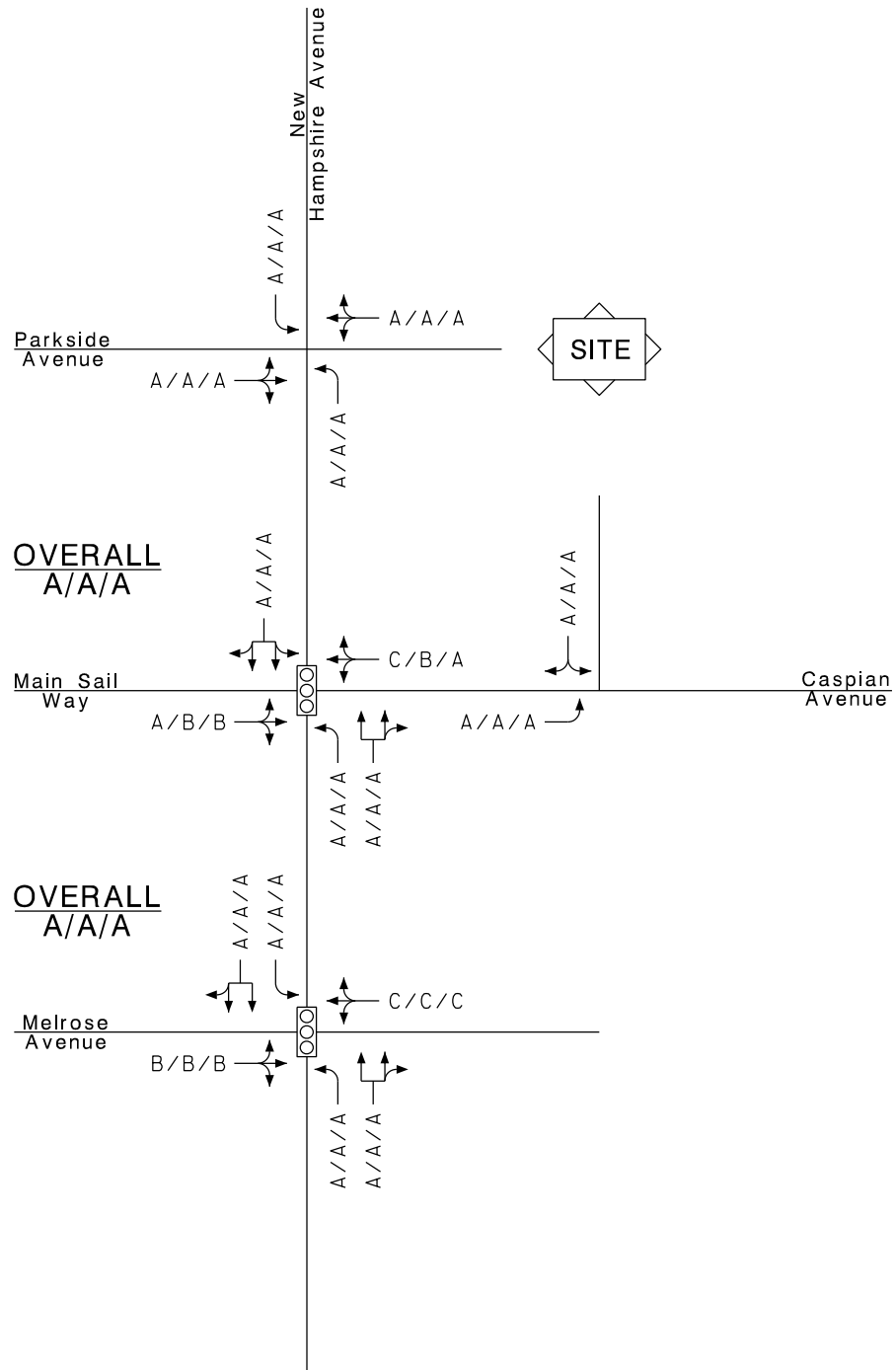
Atlantic City, Atlantic County, NJ

April 2025



TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



Caspian Pointe – Atlantic City

Atlantic City, Atlantic County, NJ

April 2025



TRAFFIC SIGNAL

AM/PM/SAT PEAK HOUR



Imperial Traffic & Data Collection
www.imperialtdc.com
1804 Haddonfield-Berlin Road
Cherry Hill, New Jersey, United States 08034
609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747

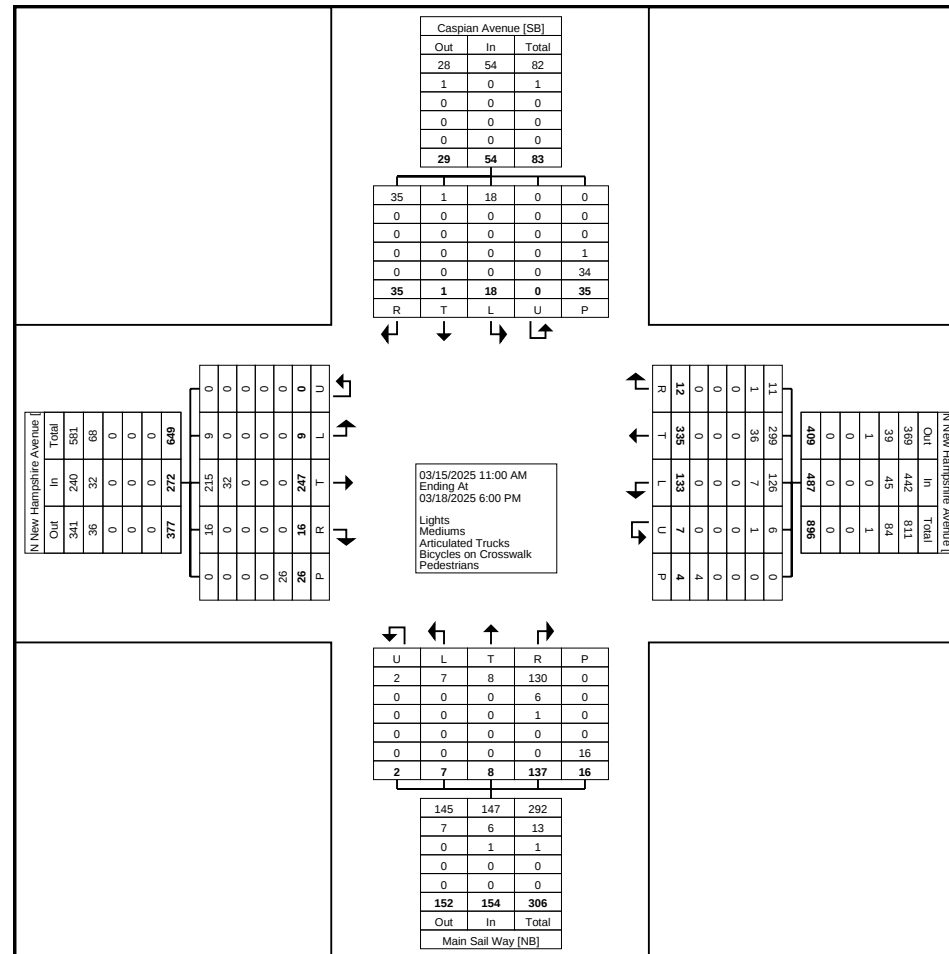
Count Name: 1. New Hampshire Avenue &
Caspian Avenue
Site Code: 1
Start Date: 03/15/2025
Page No: 1

Turning Movement Data

Start Time	N New Hampshire Avenue Eastbound							N New Hampshire Avenue Westbound							Main Sail Way Northbound							Caspian Avenue Southbound							Int. Total
	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	
11:00 AM	0	0	6	0	0	0	6	0	3	17	0	0	0	20	0	0	0	0	3	0	3	0	0	0	0	0	0	0	29
11:15 AM	0	0	4	0	0	0	4	0	3	10	0	0	0	13	0	1	0	2	1	1	4	0	1	0	1	0	0	2	23
11:30 AM	0	0	6	0	0	0	6	0	4	9	1	0	0	14	0	0	1	1	3	0	5	0	0	0	0	0	0	0	25
11:45 AM	0	0	3	1	0	0	4	0	5	7	0	0	0	12	0	0	0	1	3	0	4	0	1	0	2	0	0	3	23
Hourly Total	0	0	19	1	0	0	20	0	15	43	1	0	0	59	0	1	1	4	10	1	16	0	2	0	3	0	0	5	100
12:00 PM	0	1	6	0	0	0	7	0	2	7	1	0	0	10	0	0	0	1	3	0	4	0	0	0	1	1	13	2	23
12:15 PM	0	0	5	1	0	4	6	1	0	10	0	0	0	11	0	0	0	2	1	0	3	0	1	0	1	0	14	2	22
12:30 PM	0	0	8	0	0	2	8	0	5	4	1	0	0	10	0	0	0	2	1	2	3	0	0	0	0	2	0	2	23
12:45 PM	0	0	8	0	0	2	8	1	2	14	0	0	0	17	0	0	0	1	5	0	6	0	0	0	0	1	0	1	32
Hourly Total	0	1	27	1	0	8	29	2	9	35	2	0	0	48	0	0	0	6	10	2	16	0	1	0	2	4	27	7	100
1:00 PM	0	0	7	0	0	1	7	0	2	7	1	0	0	10	0	0	0	2	0	1	2	0	3	0	0	1	0	4	23
1:15 PM	0	0	5	0	0	1	5	0	3	11	0	0	0	14	0	1	1	5	0	0	7	0	1	0	0	0	0	1	27
1:30 PM	0	0	10	0	0	0	10	0	5	11	1	0	0	17	0	1	0	4	0	0	5	0	1	0	0	0	0	1	33
1:45 PM	0	0	8	0	0	2	8	0	2	8	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	2	0	18
Hourly Total	0	0	30	0	0	4	30	0	12	37	2	0	0	51	0	2	1	11	0	1	14	0	5	0	0	1	2	6	101
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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7:45 AM	0	0	4	0	0	1	4	1	1	7	0	0	0	9	0	0	0	4	1	0	5	0	0	0	0	0	0	0	18
Hourly Total	0	0	13	0	0	1	13	2	6	14	0	0	1	22	0	0	0	18	1	1	19	0	1	1	0	1	0	3	57
8:00 AM	0	0	3	0	0	0	3	0	1	8	0	0	0	9	0	0	0	7	1	0	8	0	0	0	0	0	0	0	20
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8:45 AM	0	0	4	0	0	0	4	0	2	4	0	0	0	6	0	1	0	3	0	1	4	0	0	0	0	0	0	0	14
Hourly Total	0	1	11	1	0	2	13	0	11	21	0	0	0	32	0	1	0	24	2	2	27	0	1	0	0	0	0	1	73
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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2:30 PM	0	0	10	1	0	0	11	0	3	7	0	0	0	10	0	0	0	2	1	0	3	0	0	0	0	1	1	1	25
2:45 PM	0	0	12	2	0	2	14	0	7	11	0	2	0	20	0	1	1	2	1	4	5	0	0	0	0	1	0	1	40
Hourly Total	0	2	43	4	1	2	50	0	17	41	0	2	1	60	0	2	3	11	5	6	21	0	0	0	0	2	1	2	133
3:00 PM	0	0	7	0	0	0	7	1	3	9	0	0	0	13	1	0	0	2	0	1	3	0	1	0	1	1	0	3	26
3:15 PM	0	1	6	2	0	0	9	2	6	9	2	0	0	19	0	0	0	4	0	0	4	0	2	0	1	1	0	4	36
3:30 PM	0	0	11	0	0	0	11	0	6	17	1	0	0	24	0	0	0	3	0	0	3	0	1	0	1	1	0	3	41

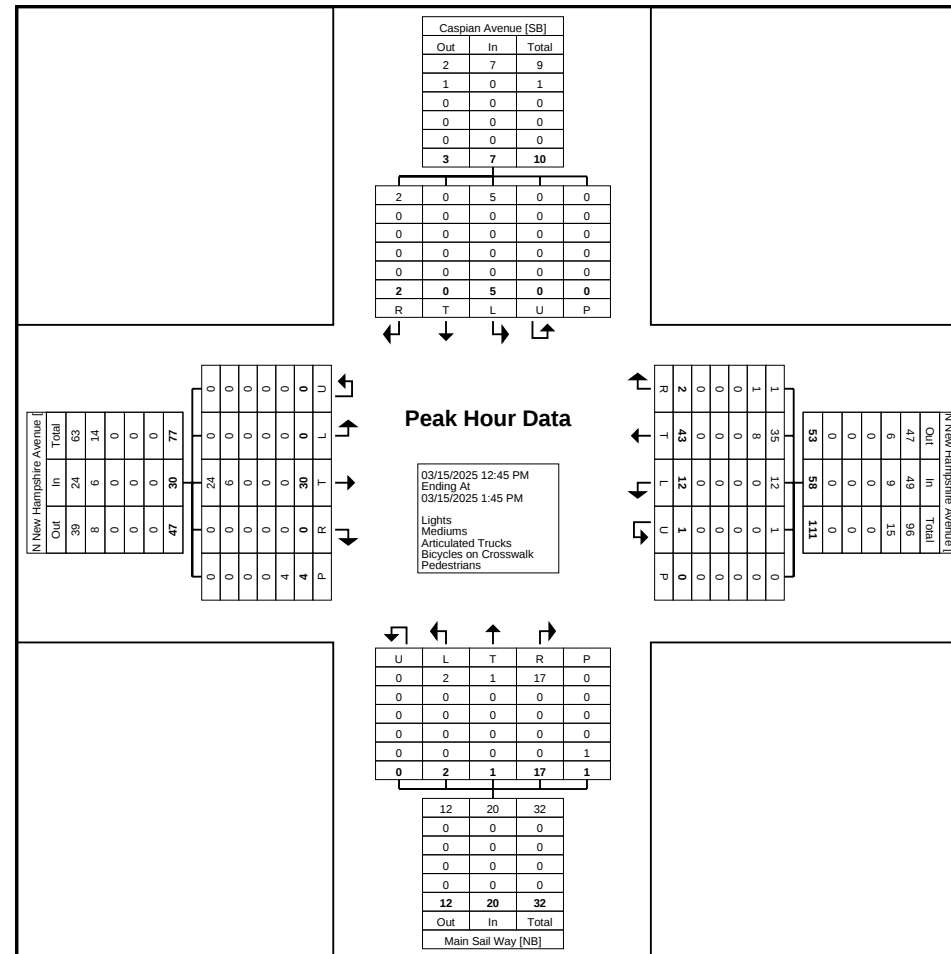
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Hourly Total	0	2	26	2	0	0	30	3	19	41	3	0	0	66	1	0	1	15	0	2	17	0	4	0	7	3	0	14	127	
4:00 PM	0	0	13	1	0	1	14	0	11	12	0	0	0	23	0	1	0	2	0	0	3	0	0	0	1	0	0	1	41	
4:15 PM	0	1	9	0	0	1	10	0	6	12	0	0	0	18	0	0	0	3	0	0	3	0	1	0	0	0	0	1	32	
4:30 PM	0	0	13	1	0	0	14	0	5	11	0	0	0	16	0	0	0	2	0	0	2	0	1	0	1	3	0	5	37	
4:45 PM	0	0	6	1	0	0	7	0	5	12	0	0	0	17	0	0	1	1	0	0	2	0	2	0	1	1	1	4	30	
Hourly Total	0	1	41	3	0	2	45	0	27	47	0	0	0	74	0	1	1	8	0	0	10	0	4	0	3	4	1	11	140	
5:00 PM	0	0	10	0	1	1	11	0	9	15	0	0	0	24	0	0	0	0	0	0	0	0	0	0	1	1	0	2	37	
5:15 PM	0	1	11	1	0	3	13	0	2	19	1	0	2	22	0	0	1	4	0	1	5	0	0	0	1	0	2	1	41	
5:30 PM	0	1	6	0	0	1	7	0	1	10	0	0	0	11	0	0	0	6	0	0	6	0	0	0	1	0	2	1	25	
5:45 PM	0	0	10	1	0	2	11	0	5	12	1	0	0	18	1	0	0	2	0	0	3	0	0	0	0	1	0	1	33	
Hourly Total	0	2	37	2	1	7	42	0	17	56	2	0	2	75	1	0	1	12	0	1	14	0	0	0	3	2	4	5	136	
Grand Total	0	9	247	14	2	26	272	7	133	335	10	2	4	487	2	7	8	109	28	16	154	0	18	1	18	17	35	54	967	
Approach %	0.0	3.3	90.8	5.1	0.7	-	-	1.4	27.3	68.8	2.1	0.4	-	-	1.3	4.5	5.2	70.8	18.2	-	-	0.0	33.3	1.9	33.3	31.5	-	-	-	
Total %	0.0	0.9	25.5	1.4	0.2	-	28.1	0.7	13.8	34.6	1.0	0.2	-	50.4	0.2	0.7	0.8	11.3	2.9	-	15.9	0.0	1.9	0.1	1.9	1.8	-	5.6	-	
Lights	0	9	215	14	2	-	240	6	126	299	9	2	-	442	2	7	8	102	28	-	147	0	18	1	18	17	-	54	883	
% Lights	-	100.0	87.0	100.0	100.0	-	88.2	85.7	94.7	89.3	90.0	100.0	-	90.8	100.0	100.0	100.0	93.6	100.0	-	95.5	-	100.0	100.0	100.0	100.0	-	100.0	91.3	
Mediums	0	0	32	0	0	-	32	1	7	36	1	0	-	45	0	0	0	6	0	-	6	0	0	0	0	0	0	-	0	83
% Mediums	-	0.0	13.0	0.0	0.0	-	11.8	14.3	5.3	10.7	10.0	0.0	-	9.2	0.0	0.0	0.0	5.5	0.0	-	3.9	-	0.0	0.0	0.0	0.0	0.0	-	0.0	8.6
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	1	0	-	1	0	0	0	0	0	-	0	1	
% Articulated Trucks	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.9	0.0	-	0.6	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	-	-	2.9	-	-	
Pedestrians	-	-	-	-	-	26	-	-	-	-	-	-	4	-	-	-	-	-	-	16	-	-	-	-	-	-	34	-	-	
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	-	97.1	-	-	

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747



Turning Movement Data Plot

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747





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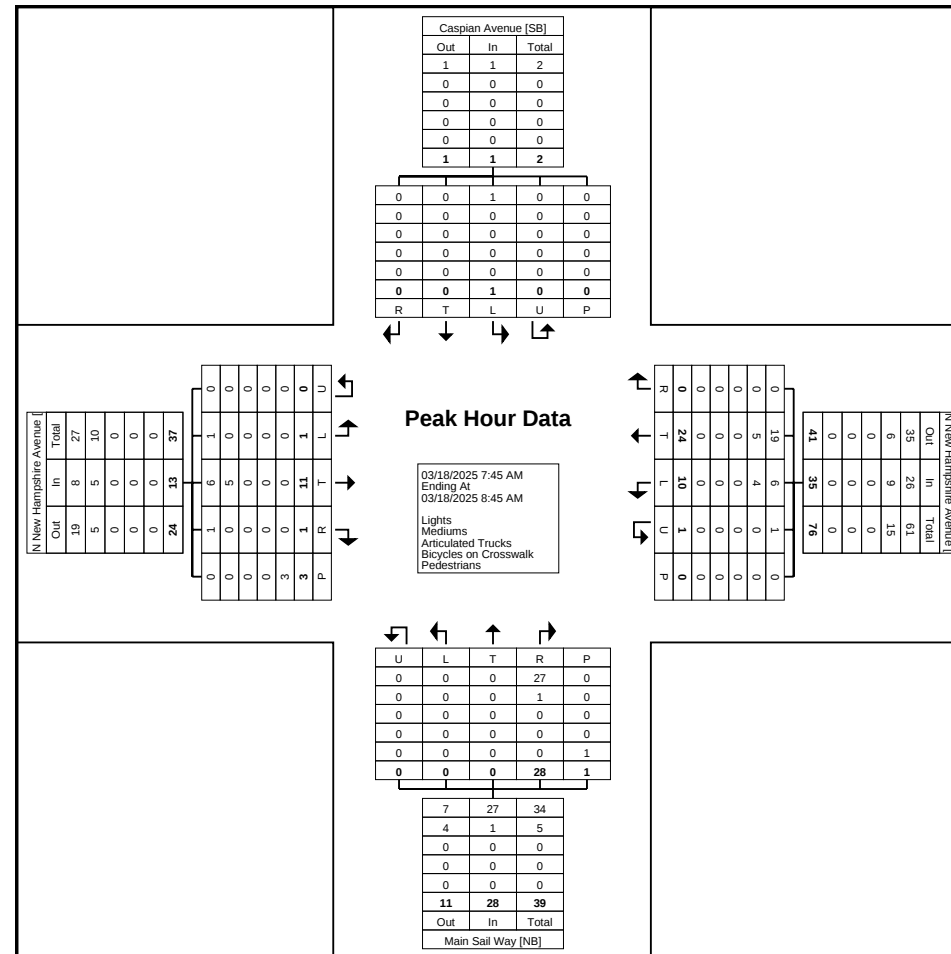
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747

Count Name: 1. New Hampshire Avenue &
Caspian Avenue
Site Code: 1
Start Date: 03/15/2025
Page No: 7



Turning Movement Peak Hour Data Plot (7:45 AM)



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609-706-6100

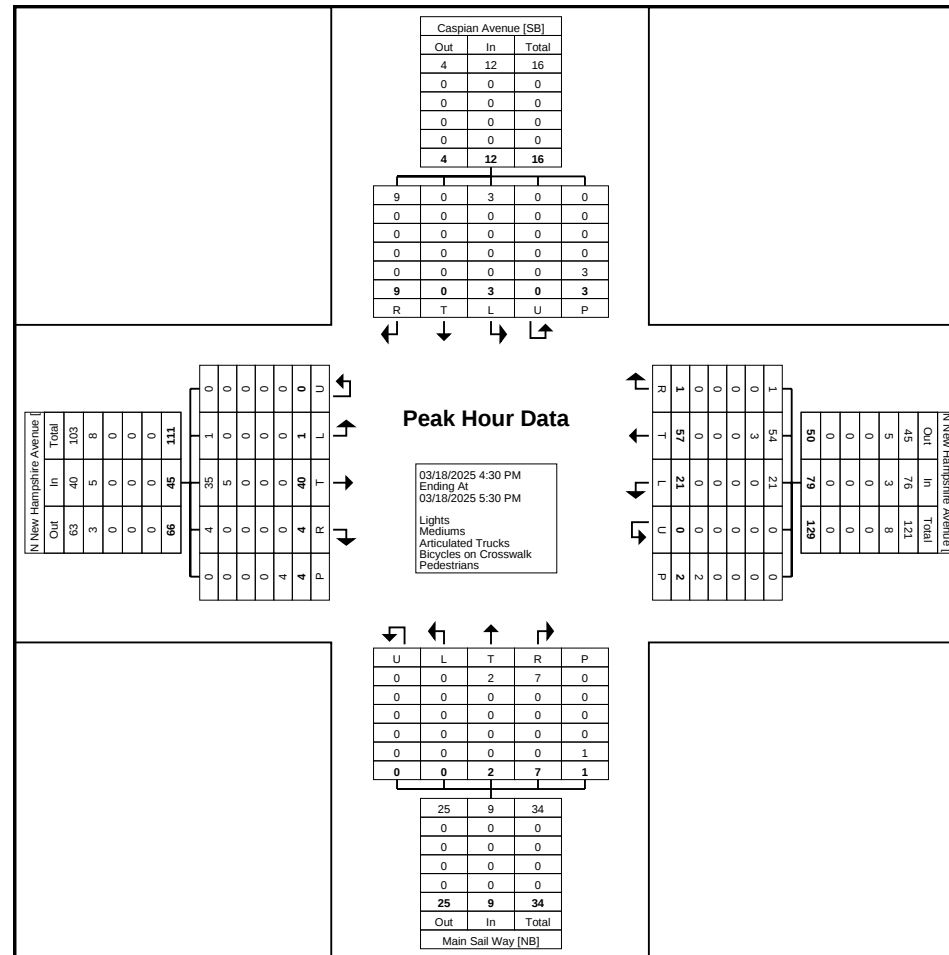
Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747

Count Name: 1. New Hampshire Avenue &
Caspian Avenue
Site Code: 1
Start Date: 03/15/2025
Page No: 8

Turning Movement Peak Hour Data (4:30 PM)

Start Time	N New Hampshire Avenue Eastbound							N New Hampshire Avenue Westbound							Main Sail Way Northbound							Caspian Avenue Southbound							Int. Total
	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	
4:30 PM	0	0	13	1	0	0	14	0	5	11	0	0	0	16	0	0	0	2	0	0	2	0	1	0	1	3	0	5	37
4:45 PM	0	0	6	1	0	0	7	0	5	12	0	0	0	17	0	0	1	1	0	0	2	0	2	0	1	1	1	4	30
5:00 PM	0	0	10	0	1	1	11	0	9	15	0	0	0	24	0	0	0	0	0	0	0	0	0	0	1	1	0	2	37
5:15 PM	0	1	11	1	0	3	13	0	2	19	1	0	2	22	0	0	1	4	0	1	5	0	0	0	1	0	2	1	41
Total	0	1	40	3	1	4	45	0	21	57	1	0	2	79	0	0	2	7	0	1	9	0	3	0	4	5	3	12	145
Approach %	0.0	2.2	88.9	6.7	2.2	-	-	0.0	26.6	72.2	1.3	0.0	-	-	0.0	0.0	22.2	77.8	0.0	-	-	0.0	25.0	0.0	33.3	41.7	-	-	-
Total %	0.0	0.7	27.6	2.1	0.7	-	31.0	0.0	14.5	39.3	0.7	0.0	-	54.5	0.0	0.0	1.4	4.8	0.0	-	6.2	0.0	2.1	0.0	2.8	3.4	-	8.3	-
PHF	0.000	0.250	0.769	0.750	0.250	-	0.804	0.000	0.583	0.750	0.250	0.000	-	0.823	0.000	0.000	0.500	0.438	0.000	-	0.450	0.000	0.375	0.000	1.000	0.417	-	0.600	0.884
Lights	0	1	35	3	1	-	40	0	21	54	1	0	-	76	0	0	2	7	0	-	9	0	3	0	4	5	-	12	137
% Lights	-	100.0	87.5	100.0	100.0	-	88.9	-	100.0	94.7	100.0	-	-	96.2	-	-	100.0	100.0	-	-	100.0	-	100.0	-	100.0	100.0	-	100.0	94.5
Mediums	0	0	5	0	0	-	5	0	0	3	0	0	-	3	0	0	0	0	0	-	0	0	0	0	0	0	-	0	8
% Mediums	-	0.0	12.5	0.0	0.0	-	11.1	-	0.0	5.3	0.0	-	-	3.8	-	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	5.5
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375005, -74.41747





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Cherry Hill, New Jersey, United States 08034
609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.372397, -74.415727

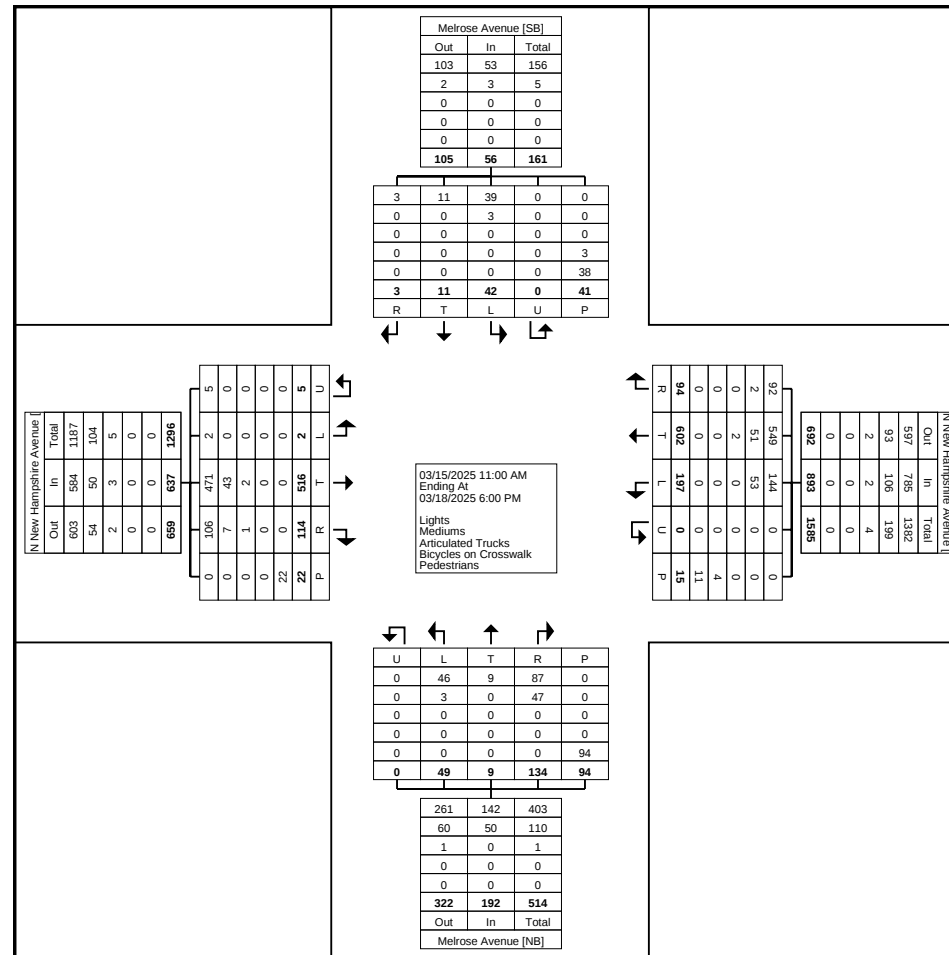
Count Name: 3. New Hampshire Avenue &
Melrose Avenue
Site Code: 3
Start Date: 03/15/2025
Page No: 1

Turning Movement Data

Start Time	N New Hampshire Avenue Eastbound							N New Hampshire Avenue Westbound							Melrose Avenue Northbound							Melrose Avenue Southbound							Int. Total	
	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total	U-Turn	Left	Thru	Right	Right on Red	Peds	App. Total		
11:00 AM	0	0	11	1	0	1	12	0	6	21	0	0	1	27	0	2	0	2	2	2	6	0	2	1	0	0	2	3	48	
11:15 AM	0	0	10	2	0	2	12	0	2	16	3	0	1	21	0	0	0	0	1	2	1	0	2	0	0	0	2	2	36	
11:30 AM	1	0	15	2	0	0	18	0	11	18	0	0	0	29	0	3	0	5	1	2	9	0	1	1	0	0	0	2	58	
11:45 AM	0	0	14	2	0	4	16	0	12	15	2	0	1	29	0	1	0	2	1	3	4	0	0	0	0	0	13	0	49	
Hourly Total	1	0	50	7	0	7	58	0	31	70	5	0	3	106	0	6	0	9	5	9	20	0	5	2	0	0	17	7	191	
12:00 PM	0	0	14	4	0	1	18	0	7	15	3	0	0	25	0	1	0	3	1	2	5	0	1	1	0	0	0	2	50	
12:15 PM	0	0	9	4	0	1	13	0	6	15	1	0	0	22	0	3	0	4	2	1	9	0	0	0	0	0	3	0	44	
12:30 PM	0	0	17	4	0	0	21	0	12	13	6	0	0	31	0	0	0	6	2	2	8	0	1	0	0	0	0	1	61	
12:45 PM	1	0	17	1	1	0	20	0	5	21	4	0	2	30	0	4	1	3	0	4	8	0	2	0	0	0	0	2	60	
Hourly Total	1	0	57	13	1	2	72	0	30	64	14	0	2	108	0	8	1	16	5	9	30	0	4	1	0	0	3	5	215	
1:00 PM	0	0	15	4	0	1	19	0	7	14	1	0	2	22	0	1	0	1	1	2	3	0	0	0	0	0	0	1	0	44
1:15 PM	0	0	17	2	0	3	19	0	9	18	2	0	0	29	0	3	0	5	1	8	9	0	0	0	0	0	0	0	57	
1:30 PM	0	0	11	4	0	0	15	0	5	18	1	0	0	24	0	2	0	4	0	1	6	0	2	0	0	0	0	2	47	
1:45 PM	0	0	10	0	0	2	10	0	4	13	2	0	0	19	0	1	0	3	1	3	5	0	0	0	0	0	0	0	34	
Hourly Total	0	0	53	10	0	6	63	0	25	63	6	0	2	94	0	7	0	13	3	14	23	0	2	0	0	0	0	1	2	182
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7:00 AM	0	0	11	5	0	0	16	0	3	4	1	0	0	8	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	25
7:15 AM	0	0	11	1	0	0	12	0	4	4	0	0	0	8	0	0	1	2	1	5	4	0	0	0	0	0	0	0	0	24
7:30 AM	0	0	16	3	0	0	19	0	3	7	1	0	0	11	0	0	0	1	3	0	4	0	1	0	0	0	2	1	35	
7:45 AM	0	0	19	4	0	0	23	0	2	14	0	0	0	16	0	0	0	2	0	3	2	0	0	0	0	0	0	0	41	
Hourly Total	0	0	57	13	0	0	70	0	12	29	2	0	0	43	0	0	1	6	4	11	11	0	1	0	0	0	2	1	125	
8:00 AM	0	0	16	0	0	0	16	0	3	10	0	1	0	14	0	0	0	1	0	0	1	0	0	0	0	0	0	0	31	
8:15 AM	0	0	16	2	1	0	19	0	6	7	0	0	0	13	0	2	1	3	0	1	6	0	2	0	0	0	0	3	2	40
8:30 AM	1	0	17	1	0	0	19	0	3	14	1	0	0	18	0	0	0	2	1	1	3	0	1	0	0	0	0	1	41	
8:45 AM	0	0	14	1	0	0	15	0	5	13	1	0	0	19	0	0	0	1	0	3	1	0	0	0	0	0	1	0	35	
Hourly Total	1	0	63	4	1	0	69	0	17	44	2	1	0	64	0	2	1	7	1	5	11	0	3	0	0	0	4	3	147	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2:00 PM	0	0	19	3	0	1	22	0	4	18	4	0	0	26	0	3	0	5	0	1	8	0	1	0	0	0	2	1	57	
2:15 PM	0	0	12	5	1	1	18	0	5	11	10	0	0	26	0	2	0	0	1	2	3	0	2	0	0	0	0	2	2	49
2:30 PM	0	0	15	4	1	0	20	0	6	10	4	0	0	20	0	2	1	7	1	3	11	0	2	2	0	0	1	4	55	
2:45 PM	0	0	9	7	1	1	17	0	4	23	3	0	1	30	0	3	0	5	3	4	11	0	2	0	2	0	0	4	62	
Hourly Total	0	0	55	19	3	3	77	0	19	62	21	0	1	102	0	10	1	17	5	10	33	0	7	2	2	0	5	11	223	
3:00 PM	0	0	12	4	0	0	16	0	4	15	1	0	0	20	0	3	0	5	1	3	9	0	2	0	0	0	0	2	47	
3:15 PM	0	2	13	3	0	0	18	0	3	20	4	0	0	27	0	1	1	1	2	2	5	0	3	0	0	0	0	3	53	
3:30 PM	0	0	19	4	0	0	23	0	7	33	3	1	0	44	0	1	0	3	1	2	5	0	3	1	0	0	0	4	76	

3:45 PM	0	0	14	2	0	0	16	0	5	17	3	1	0	26	0	1	0	0	4	3	5	0	2	0	0	0	2	49		
Hourly Total	0	2	58	13	0	0	73	0	19	85	11	2	0	117	0	6	1	9	8	10	24	0	10	1	0	0	0	11	225	
4:00 PM	0	0	17	6	0	1	23	0	7	27	3	0	1	37	0	1	0	2	1	1	4	0	1	2	0	0	0	3	67	
4:15 PM	1	0	9	5	0	0	15	0	5	23	2	0	1	30	0	0	1	2	3	8	6	0	2	0	0	0	3	2	53	
4:30 PM	0	0	24	3	1	1	28	0	5	18	4	0	0	27	0	2	1	2	0	5	5	0	1	0	0	0	0	1	61	
4:45 PM	0	0	13	0	0	1	13	0	6	20	5	0	0	31	0	2	0	3	1	5	6	0	1	2	0	0	1	3	53	
Hourly Total	1	0	63	14	1	3	79	0	23	88	14	0	2	125	0	5	2	9	5	19	21	0	5	4	0	0	4	9	234	
5:00 PM	0	0	17	3	0	0	20	0	3	27	4	0	1	34	0	2	0	2	0	1	4	0	1	0	0	0	0	1	59	
5:15 PM	0	0	15	5	0	0	20	0	8	26	5	0	1	39	0	2	2	4	2	0	10	0	0	0	0	0	1	0	69	
5:30 PM	0	0	14	2	0	1	16	0	6	20	2	0	2	28	0	0	0	1	1	5	2	0	1	0	1	0	4	2	48	
5:45 PM	1	0	14	5	0	0	20	0	4	24	5	0	1	33	0	1	0	1	1	1	3	0	3	1	0	0	0	4	60	
Hourly Total	1	0	60	15	0	1	76	0	21	97	16	0	5	134	0	5	2	8	4	7	19	0	5	1	1	0	5	7	236	
Grand Total	5	2	516	108	6	22	637	0	197	602	91	3	15	893	0	49	9	94	40	94	192	0	42	11	3	0	41	56	1778	
Approach %	0.8	0.3	81.0	17.0	0.9	-	-	0.0	22.1	67.4	10.2	0.3	-	-	0.0	25.5	4.7	49.0	20.8	-	-	0.0	75.0	19.6	5.4	0.0	-	-	-	
Total %	0.3	0.1	29.0	6.1	0.3	-	35.8	0.0	11.1	33.9	5.1	0.2	-	50.2	0.0	2.8	0.5	5.3	2.2	-	10.8	0.0	2.4	0.6	0.2	0.0	-	3.1	-	
Lights	5	2	471	100	6	-	584	0	144	549	89	3	-	785	0	46	9	59	28	-	142	0	39	11	3	0	-	53	1564	
% Lights	100.0	100.0	91.3	92.6	100.0	-	91.7	-	73.1	91.2	97.8	100.0	-	87.9	-	93.9	100.0	62.8	70.0	-	74.0	-	92.9	100.0	100.0	-	-	94.6	88.0	
Mediums	0	0	43	7	0	-	50	0	53	51	2	0	-	106	0	3	0	35	12	-	50	0	3	0	0	0	-	3	209	
% Mediums	0.0	0.0	8.3	6.5	0.0	-	7.8	-	26.9	8.5	2.2	0.0	-	11.9	-	6.1	0.0	37.2	30.0	-	26.0	-	7.1	0.0	0.0	-	-	5.4	11.8	
Articulated Trucks	0	0	2	1	0	-	3	0	0	2	0	0	-	2	0	0	0	0	0	-	0	0	0	0	0	0	0	-	0	5
% Articulated Trucks	0.0	0.0	0.4	0.9	0.0	-	0.5	-	0.0	0.3	0.0	0.0	-	0.2	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.3	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	4	-	-	-	-	-	-	0	-	-	-	-	-	-	3	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	26.7	-	-	-	-	-	-	0.0	-	-	-	-	-	-	7.3	-	-	
Pedestrians	-	-	-	-	-	22	-	-	-	-	-	-	11	-	-	-	-	-	-	94	-	-	-	-	-	-	38	-	-	
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	73.3	-	-	-	-	-	-	100.0	-	-	-	-	-	-	92.7	-	-	

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.372397, -74.415727



Turning Movement Data Plot



Imperial Traffic & Data Collection

www.imperialtdc.com

1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Count Name: 3. New Hampshire Avenue &

Melrose Avenue

Site Code: 3

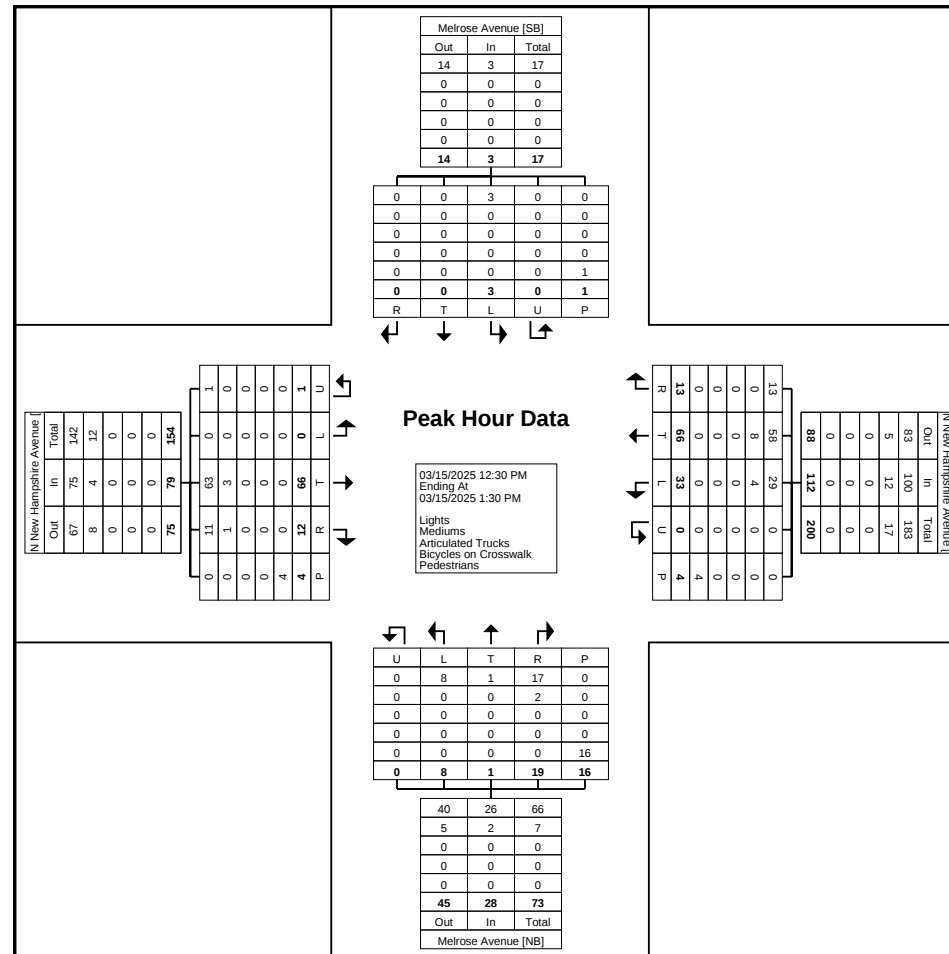
Start Date: 03/15/2025

Page No: 4

Turning Movement Peak Hour Data (12:30 PM)

[illegible]

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.372397, -74.415727



Turning Movement Peak Hour Data Plot (12:30 PM)



Imperial Traffic & Data Collection

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1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire

Municipality: Atlantic City, Atlantic County, NJ

Setup: SF

Location: 39.372397, -74.415727

Count Name: 3. New Hampshire Avenue &

Melrose Avenue

Site Code: 3

Start Date: 03/15/2025

Page No: 6

Turning Movement Peak Hour Data (7:45 AM)

[illegible]



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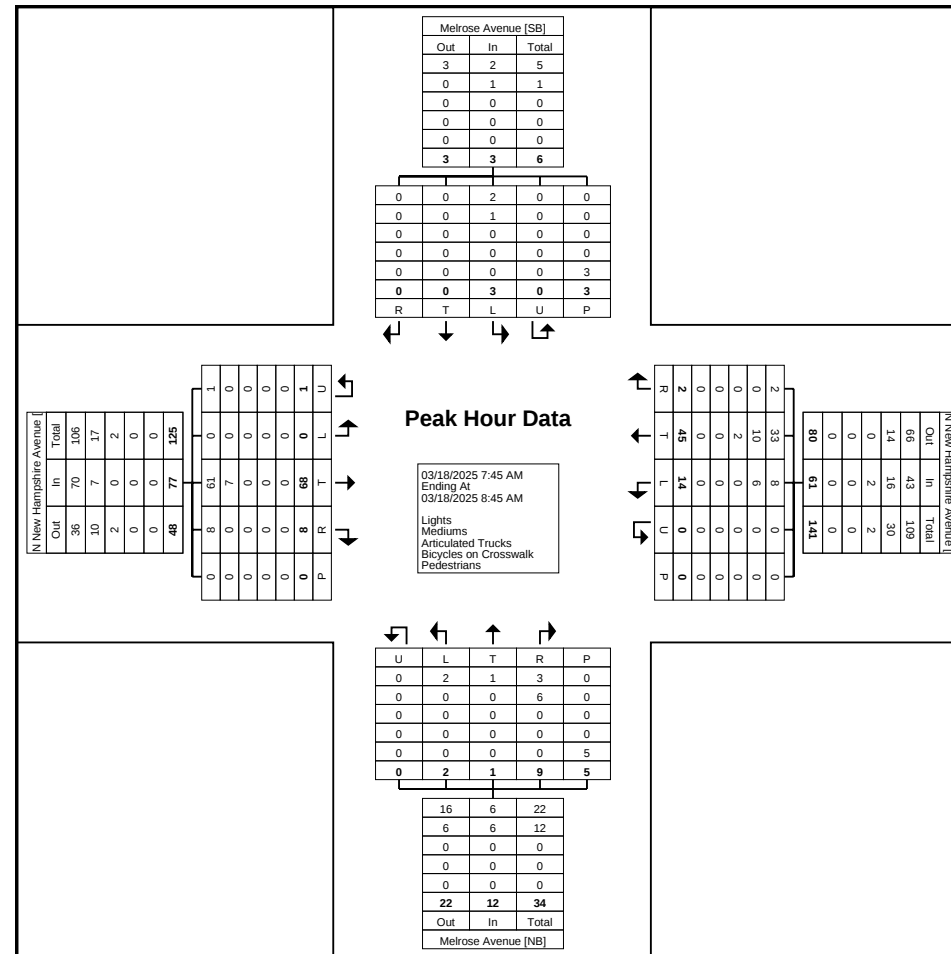
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.372397, -74.415727

Count Name: 3. New Hampshire Avenue &
Melrose Avenue
Site Code: 3
Start Date: 03/15/2025
Page No: 7



Turning Movement Peak Hour Data Plot (7:45 AM)



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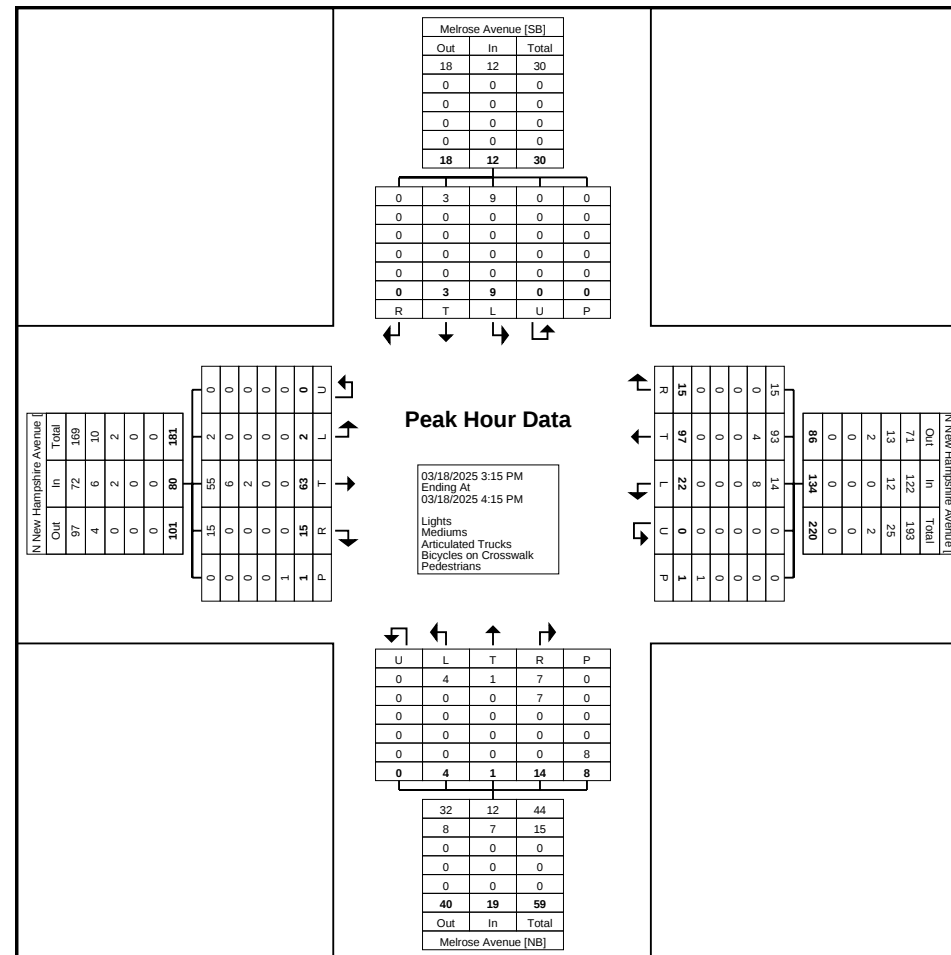
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.372397, -74.415727

Count Name: 3. New Hampshire Avenue &
Melrose Avenue
Site Code: 3
Start Date: 03/15/2025
Page No: 9



Turning Movement Peak Hour Data Plot (3:15 PM)



Imperial Traffic & Data Collection
www.imperialtdc.com
1804 Haddonfield-Berlin Road
Cherry Hill, New Jersey, United States 08034
609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
Parkside Avenue
Site Code: 2
Start Date: 03/15/2025
Page No: 1

Turning Movement Data

Start Time	N New Hampshire Avenue Eastbound					N New Hampshire Avenue Westbound					Parkside Avenue Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
11:00 AM	0	3	0	0	3	0	4	12	1	16	0	0	2	0	2	21
11:15 AM	0	3	1	0	4	0	0	11	0	11	0	0	1	0	1	16
11:30 AM	0	5	2	0	7	0	1	11	0	12	0	0	1	0	1	20
11:45 AM	0	3	1	0	4	0	0	9	1	9	0	2	1	0	3	16
Hourly Total	0	14	4	0	18	0	5	43	2	48	0	2	5	0	7	73
12:00 PM	0	3	2	0	5	0	0	6	10	6	0	0	3	10	3	14
12:15 PM	0	5	1	0	6	0	1	13	6	14	0	0	1	4	1	21
12:30 PM	0	8	1	0	9	0	0	6	0	6	0	0	0	0	0	15
12:45 PM	0	8	1	0	9	0	0	14	0	14	0	0	1	0	1	24
Hourly Total	0	24	5	0	29	0	1	39	16	40	0	0	5	14	5	74
1:00 PM	0	6	0	0	6	0	1	7	0	8	0	0	0	0	0	14
1:15 PM	0	5	0	0	5	0	3	10	0	13	0	0	0	0	0	18
1:30 PM	0	10	0	0	10	0	0	11	0	11	0	0	0	1	0	21
1:45 PM	0	5	0	0	5	0	0	8	0	8	0	0	4	0	4	17
Hourly Total	0	26	0	0	26	0	4	36	0	40	0	0	4	1	4	70
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	2	0	0	2	1	1	1	0	3	0	0	0	0	0	5
7:15 AM	0	2	0	0	2	0	0	2	0	2	0	0	1	0	1	5
7:30 AM	0	3	0	0	3	0	0	3	0	3	0	0	0	0	0	6
7:45 AM	0	4	0	0	4	0	0	8	0	8	0	0	0	0	0	12
Hourly Total	0	11	0	0	11	1	1	14	0	16	0	0	1	0	1	28
8:00 AM	0	4	0	0	4	0	1	6	0	7	0	0	0	0	0	11
8:15 AM	0	4	0	0	4	0	1	3	0	4	0	1	0	1	1	9
8:30 AM	0	3	0	0	3	0	1	5	1	6	0	0	0	1	0	9
8:45 AM	0	3	0	0	3	0	1	5	0	6	0	0	1	1	1	10
Hourly Total	0	14	0	0	14	0	4	19	1	23	0	1	1	3	2	39
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:00 PM	0	13	2	0	15	0	0	15	0	15	0	0	1	0	1	31
2:15 PM	0	10	0	0	10	0	4	9	0	13	0	0	1	0	1	24
2:30 PM	0	8	0	0	8	0	0	7	1	7	0	1	2	1	3	18
2:45 PM	0	14	0	0	14	0	0	12	0	12	0	0	1	0	1	27
Hourly Total	0	45	2	0	47	0	4	43	1	47	0	1	5	1	6	100
3:00 PM	0	6	1	0	7	0	0	11	0	11	0	0	1	0	1	19
3:15 PM	1	8	0	0	9	0	0	9	0	9	0	0	1	0	1	19
3:30 PM	0	10	1	0	11	0	0	20	0	20	0	0	0	0	0	31
3:45 PM	0	3	1	0	4	0	0	10	0	10	0	0	0	1	0	14

Hourly Total	1	27	3	0	31	0	0	50	0	50	0	0	2	1	2	83
4:00 PM	0	11	0	0	11	1	0	13	0	14	0	0	2	2	2	27
4:15 PM	0	8	1	0	9	1	3	10	0	14	0	1	0	0	1	24
4:30 PM	0	11	2	0	13	0	0	15	0	15	0	0	1	1	1	29
4:45 PM	0	9	0	0	9	0	0	14	1	14	0	1	0	0	1	24
Hourly Total	0	39	3	0	42	2	3	52	1	57	0	2	3	3	5	104
5:00 PM	0	8	2	0	10	0	2	15	0	17	0	0	3	0	3	30
5:15 PM	0	12	1	0	13	0	0	20	1	20	0	0	0	0	0	33
5:30 PM	0	7	0	0	7	0	0	11	0	11	0	0	0	1	0	18
5:45 PM	0	12	0	0	12	0	1	12	0	13	0	0	0	0	0	25
Hourly Total	0	39	3	0	42	0	3	58	1	61	0	0	3	1	3	106
Grand Total	1	239	20	0	260	3	25	354	22	382	0	6	29	24	35	677
Approach %	0.4	91.9	7.7	-	-	0.8	6.5	92.7	-	-	0.0	17.1	82.9	-	-	-
Total %	0.1	35.3	3.0	-	38.4	0.4	3.7	52.3	-	56.4	0.0	0.9	4.3	-	5.2	-
Lights	1	211	20	-	232	3	23	318	-	344	0	6	26	-	32	608
% Lights	100.0	88.3	100.0	-	89.2	100.0	92.0	89.8	-	90.1	-	100.0	89.7	-	91.4	89.8
Mediums	0	28	0	-	28	0	2	36	-	38	0	0	3	-	3	69
% Mediums	0.0	11.7	0.0	-	10.8	0.0	8.0	10.2	-	9.9	-	0.0	10.3	-	8.6	10.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	22	-	-	-	-	24	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-



www.imperialtdc.com

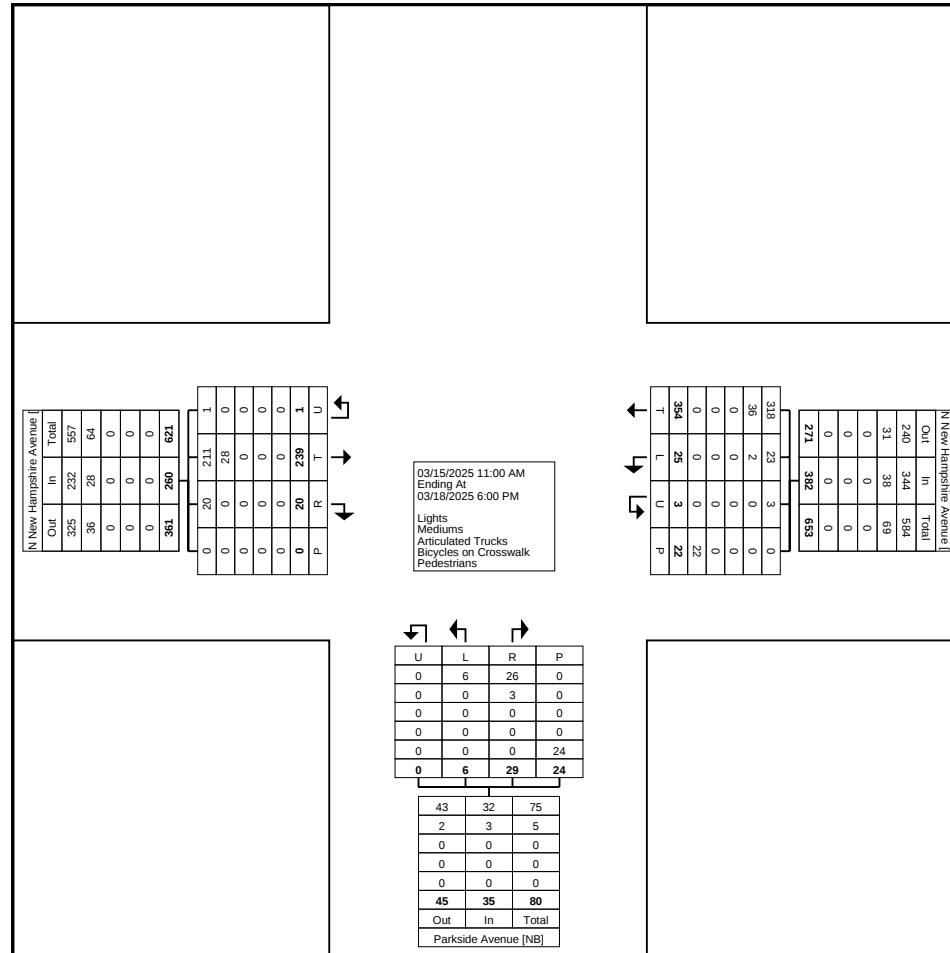
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
Parkside Avenue
Site Code: 2
Start Date: 03/15/2025
Page No: 3



Turning Movement Data Plot



Imperial Traffic & Data Collection
 www.imperialtdc.com
 1804 Haddonfield-Berlin Road
 Cherry Hill, New Jersey, United States 08034
 609-706-6100

Project: New Hampshire
 Municipality: Atlantic City, Atlantic County, NJ
 Setup: SF
 Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
 Parkside Avenue
 Site Code: 2
 Start Date: 03/15/2025
 Page No: 4

Turning Movement Peak Hour Data (12:45 PM)

Start Time	N New Hampshire Avenue Eastbound					N New Hampshire Avenue Westbound					Parkside Avenue Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
12:45 PM	0	8	1	0	9	0	0	14	0	14	0	0	1	0	1	24
1:00 PM	0	6	0	0	6	0	1	7	0	8	0	0	0	0	0	14
1:15 PM	0	5	0	0	5	0	3	10	0	13	0	0	0	0	0	18
1:30 PM	0	10	0	0	10	0	0	11	0	11	0	0	0	1	0	21
Total	0	29	1	0	30	0	4	42	0	46	0	0	1	1	1	77
Approach %	0.0	96.7	3.3	-	-	0.0	8.7	91.3	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	37.7	1.3	-	39.0	0.0	5.2	54.5	-	59.7	0.0	0.0	1.3	-	1.3	-
PHF	0.000	0.725	0.250	-	0.750	0.000	0.333	0.750	-	0.821	0.000	0.000	0.250	-	0.250	0.802
Lights	0	23	1	-	24	0	4	34	-	38	0	0	1	-	1	63
% Lights	-	79.3	100.0	-	80.0	-	100.0	81.0	-	82.6	-	-	100.0	-	100.0	81.8
Mediums	0	6	0	-	6	0	0	8	-	8	0	0	0	-	0	14
% Mediums	-	20.7	0.0	-	20.0	-	0.0	19.0	-	17.4	-	-	0.0	-	0.0	18.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Imperial Traffic & Data Collection

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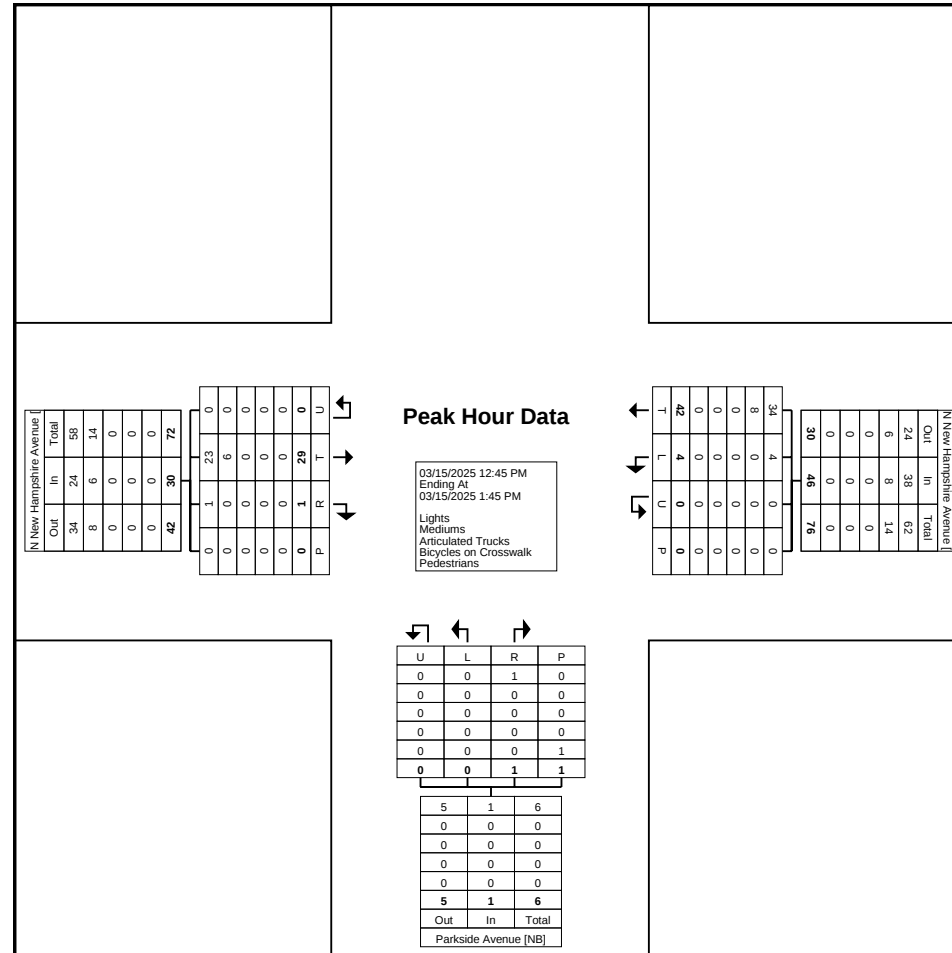
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
Parkside Avenue
Site Code: 2
Start Date: 03/15/2025
Page No: 5



Turning Movement Peak Hour Data Plot (12:45 PM)



Imperial Traffic & Data Collection
 www.imperialtdc.com
 1804 Haddonfield-Berlin Road
 Cherry Hill, New Jersey, United States 08034
 609-706-6100

Project: New Hampshire
 Municipality: Atlantic City, Atlantic County, NJ
 Setup: SF
 Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
 Parkside Avenue
 Site Code: 2
 Start Date: 03/15/2025
 Page No: 6

Turning Movement Peak Hour Data (7:45 AM)

Start Time	N New Hampshire Avenue Eastbound					N New Hampshire Avenue Westbound					Parkside Avenue Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:45 AM	0	4	0	0	4	0	0	8	0	8	0	0	0	0	0	12
8:00 AM	0	4	0	0	4	0	1	6	0	7	0	0	0	0	0	11
8:15 AM	0	4	0	0	4	0	1	3	0	4	0	1	0	1	1	9
8:30 AM	0	3	0	0	3	0	1	5	1	6	0	0	0	1	0	9
Total	0	15	0	0	15	0	3	22	1	25	0	1	0	2	1	41
Approach %	0.0	100.0	0.0	-	-	0.0	12.0	88.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	36.6	0.0	-	36.6	0.0	7.3	53.7	-	61.0	0.0	2.4	0.0	-	2.4	-
PHF	0.000	0.938	0.000	-	0.938	0.000	0.750	0.688	-	0.781	0.000	0.250	0.000	-	0.250	0.854
Lights	0	10	0	-	10	0	3	17	-	20	0	1	0	-	1	31
% Lights	-	66.7	-	-	66.7	-	100.0	77.3	-	80.0	-	100.0	-	-	100.0	75.6
Mediums	0	5	0	-	5	0	0	5	-	5	0	0	0	-	0	10
% Mediums	-	33.3	-	-	33.3	-	0.0	22.7	-	20.0	-	0.0	-	-	0.0	24.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-



www.imperialtdc.com

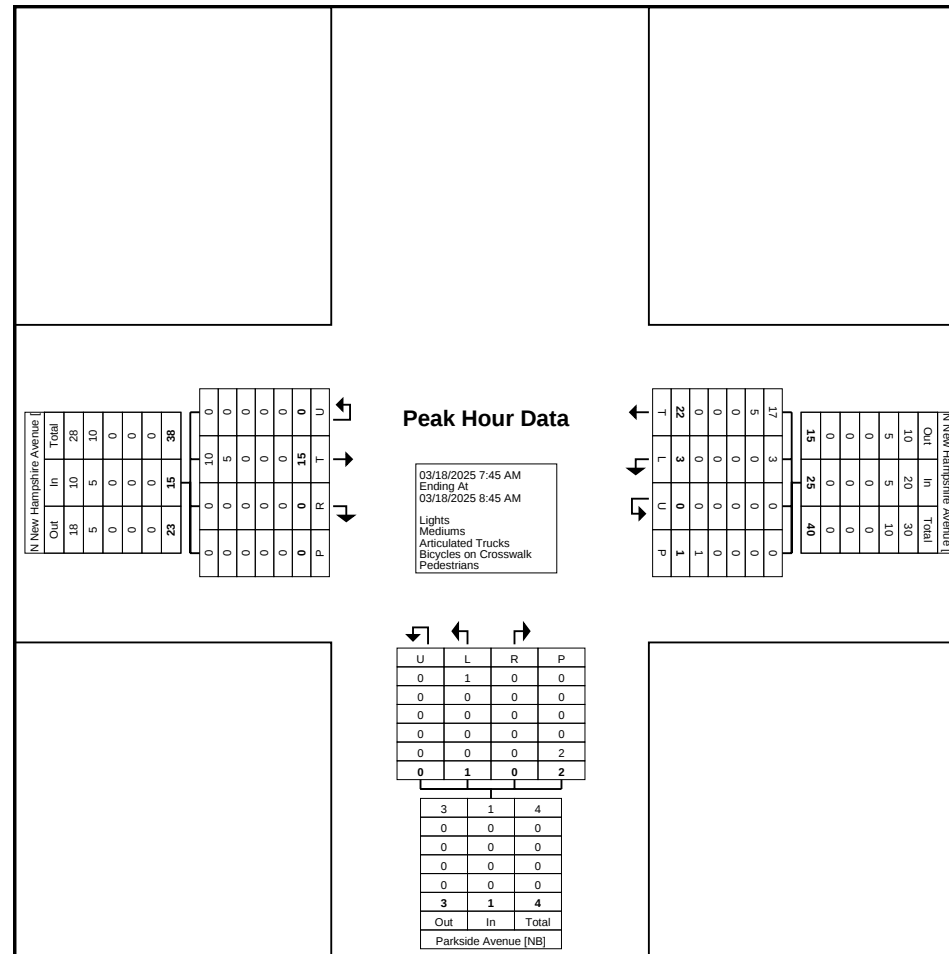
1804 Haddonfield-Berlin Road

Cherry Hill, New Jersey, United States 08034

609-706-6100

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
Parkside Avenue
Site Code: 2
Start Date: 03/15/2025
Page No: 7



Turning Movement Peak Hour Data Plot (7:45 AM)



Imperial Traffic & Data Collection
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 1804 Haddonfield-Berlin Road
 Cherry Hill, New Jersey, United States 08034
 609-706-6100

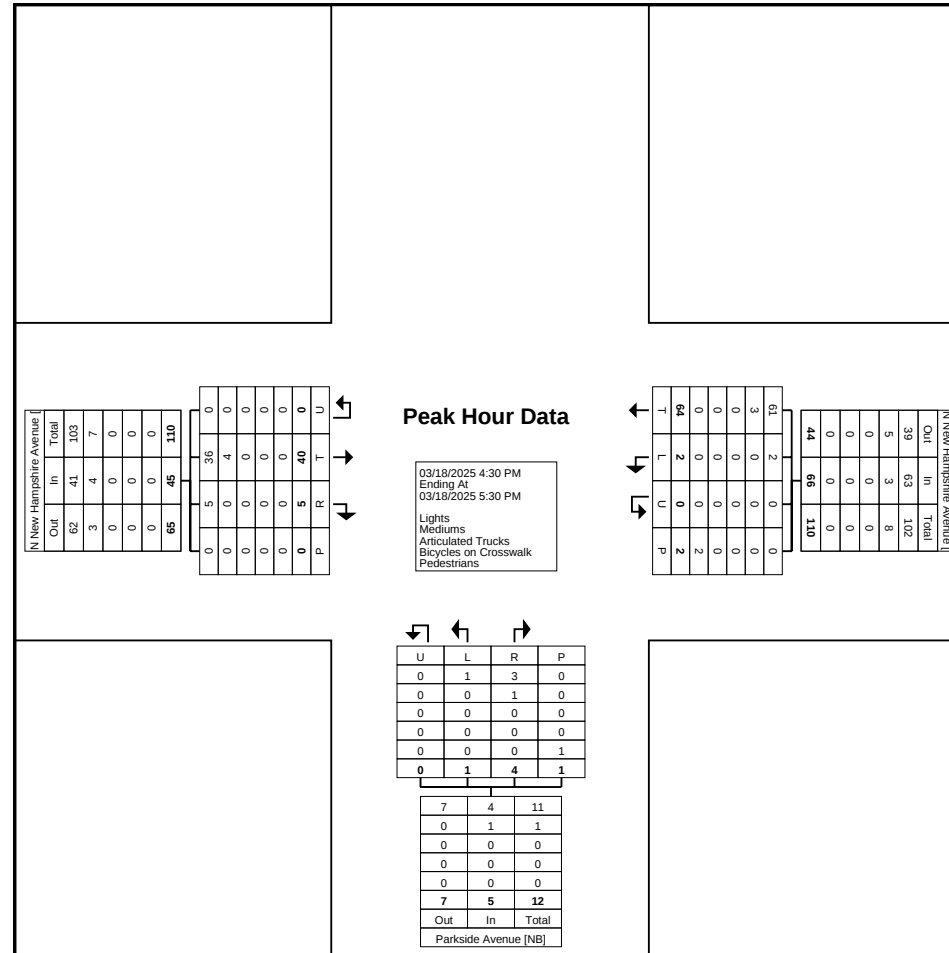
Project: New Hampshire
 Municipality: Atlantic City, Atlantic County, NJ
 Setup: SF
 Location: 39.375924, -74.418117

Count Name: 2. New Hampshire Avenue &
 Parkside Avenue
 Site Code: 2
 Start Date: 03/15/2025
 Page No: 8

Turning Movement Peak Hour Data (4:30 PM)

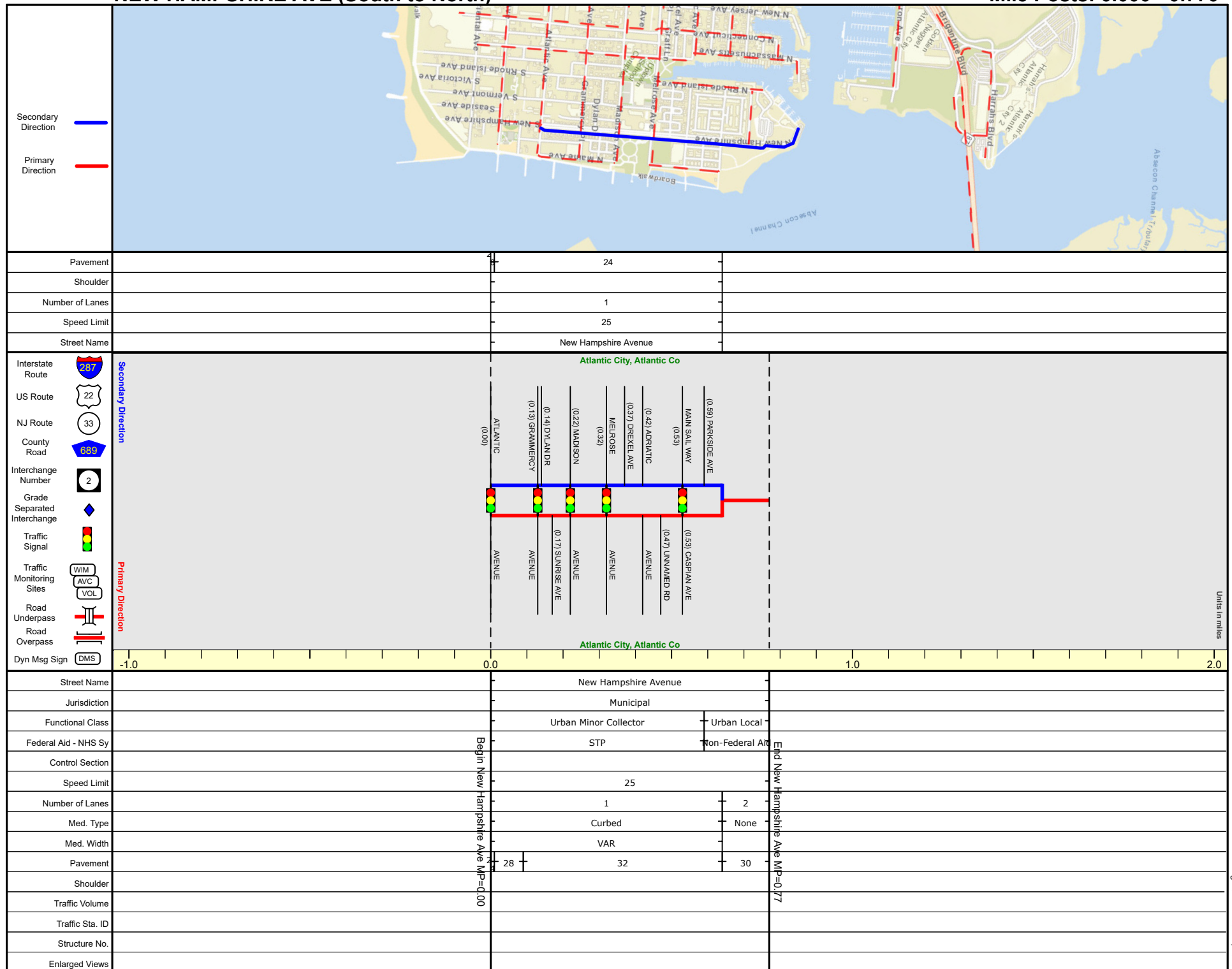
Start Time	N New Hampshire Avenue Eastbound					N New Hampshire Avenue Westbound					Parkside Avenue Northbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
4:30 PM	0	11	2	0	13	0	0	15	0	15	0	0	1	1	1	29
4:45 PM	0	9	0	0	9	0	0	14	1	14	0	1	0	0	1	24
5:00 PM	0	8	2	0	10	0	2	15	0	17	0	0	3	0	3	30
5:15 PM	0	12	1	0	13	0	0	20	1	20	0	0	0	0	0	33
Total	0	40	5	0	45	0	2	64	2	66	0	1	4	1	5	116
Approach %	0.0	88.9	11.1	-	-	0.0	3.0	97.0	-	-	0.0	20.0	80.0	-	-	-
Total %	0.0	34.5	4.3	-	38.8	0.0	1.7	55.2	-	56.9	0.0	0.9	3.4	-	4.3	-
PHF	0.000	0.833	0.625	-	0.865	0.000	0.250	0.800	-	0.825	0.000	0.250	0.333	-	0.417	0.879
Lights	0	36	5	-	41	0	2	61	-	63	0	1	3	-	4	108
% Lights	-	90.0	100.0	-	91.1	-	100.0	95.3	-	95.5	-	100.0	75.0	-	80.0	93.1
Mediums	0	4	0	-	4	0	0	3	-	3	0	0	1	-	1	8
% Mediums	-	10.0	0.0	-	8.9	-	0.0	4.7	-	4.5	-	0.0	25.0	-	20.0	6.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	2	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Project: New Hampshire
Municipality: Atlantic City, Atlantic County, NJ
Setup: SF
Location: 39.375924, -74.418117



NEW HAMPSHIRE AVE (South to North)

Mile Posts: 0.000 - 0.770

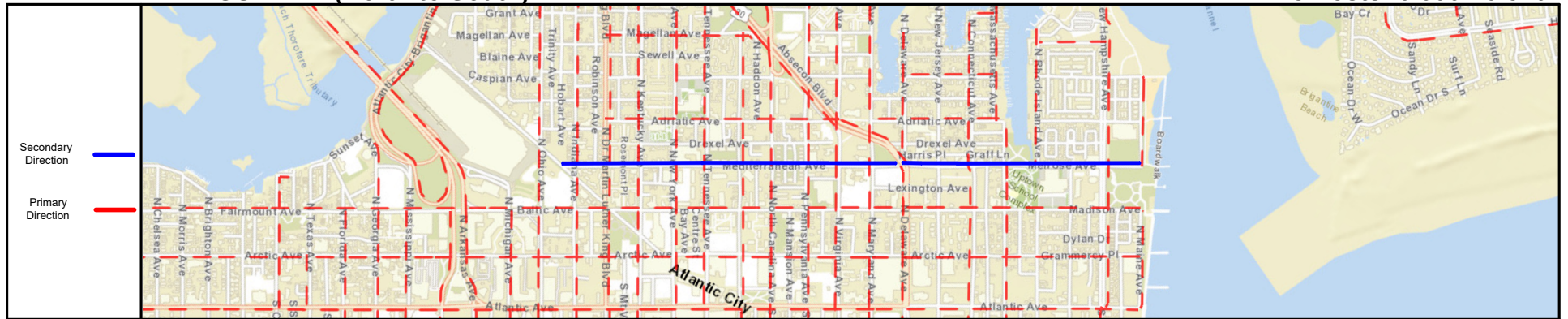


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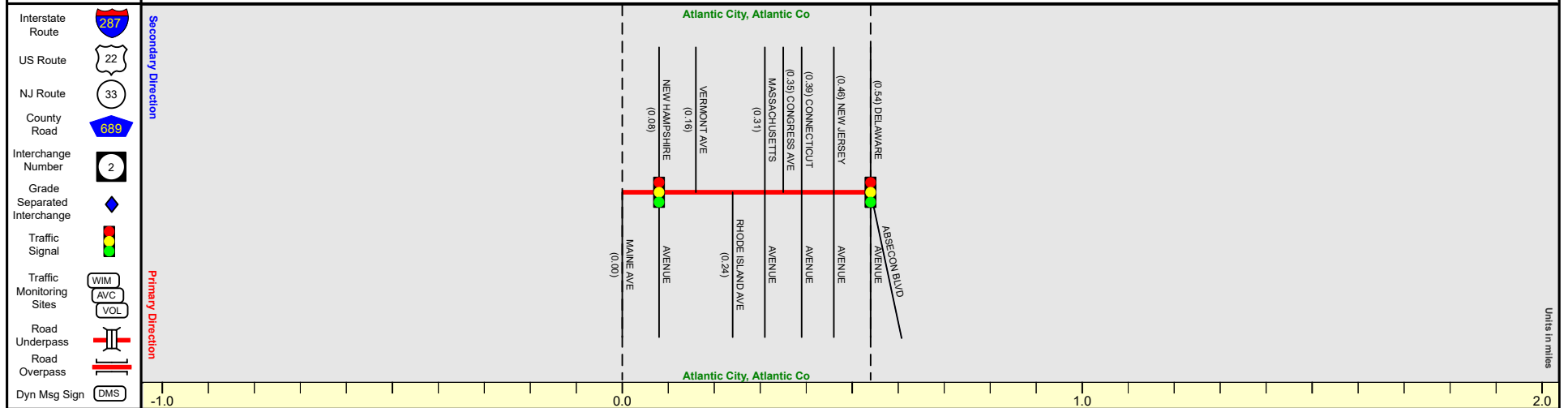
Date last inventoried: August 2015

MELROSE AVE (North to South)

Mile Posts: 0.000 - 0.540



Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Street Name	Melrose Avenue
Jurisdiction	Municipal
Functional Class	Urban Local
Federal Aid - NHS Sy	Non-Federal Aid
Control Section	Begin Melrose Ave MP=0.00
Speed Limit	25
Number of Lanes	2
Med. Type	None
Med. Width	
Pavement	34
Shoulder	36
Traffic Volume	
Traffic Sta. ID	
Structure No.	
Enlarged Views	

SRI = 01021006__

Date last inventoried: August 2015

PARKSIDE AVE (East to West)

Mile Posts: 0.000 - 0.150

Secondary Direction Primary Direction			
Pavement			
Shoulder			
Number of Lanes			
Speed Limit			
Street Name			
Interstate Route US Route NJ Route County Road Interchange Number Grade Separated Interchange Traffic Signal Traffic Monitoring Sites Road Underpass Road Overpass Dyn Msg Sign	Secondary Direction Primary Direction Atlantic, Atl. Cd. NEW HAMPSHIRE (0.00) RIHODE ISLAND (0.15) AVENUE AVENUE Atlantic, Atl. Cd. Units in miles		
Street Name		Parkside Avenue	
Jurisdiction		Municipal	
Functional Class		Urban Minor-Collector	
Federal Aid - NHS Sy		STP	
Control Section	Begin Parkside Ave MP=0.00		End Parkside Ave MP=0.15
Speed Limit		25	
Number of Lanes		2	
Med. Type		None	
Med. Width			
Pavement		34	
Shoulder			
Traffic Volume			
Traffic Sta. ID			
Structure No.			
Enlarged Views			

SRI = 01021053__

Date last inventoried: August 2015

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

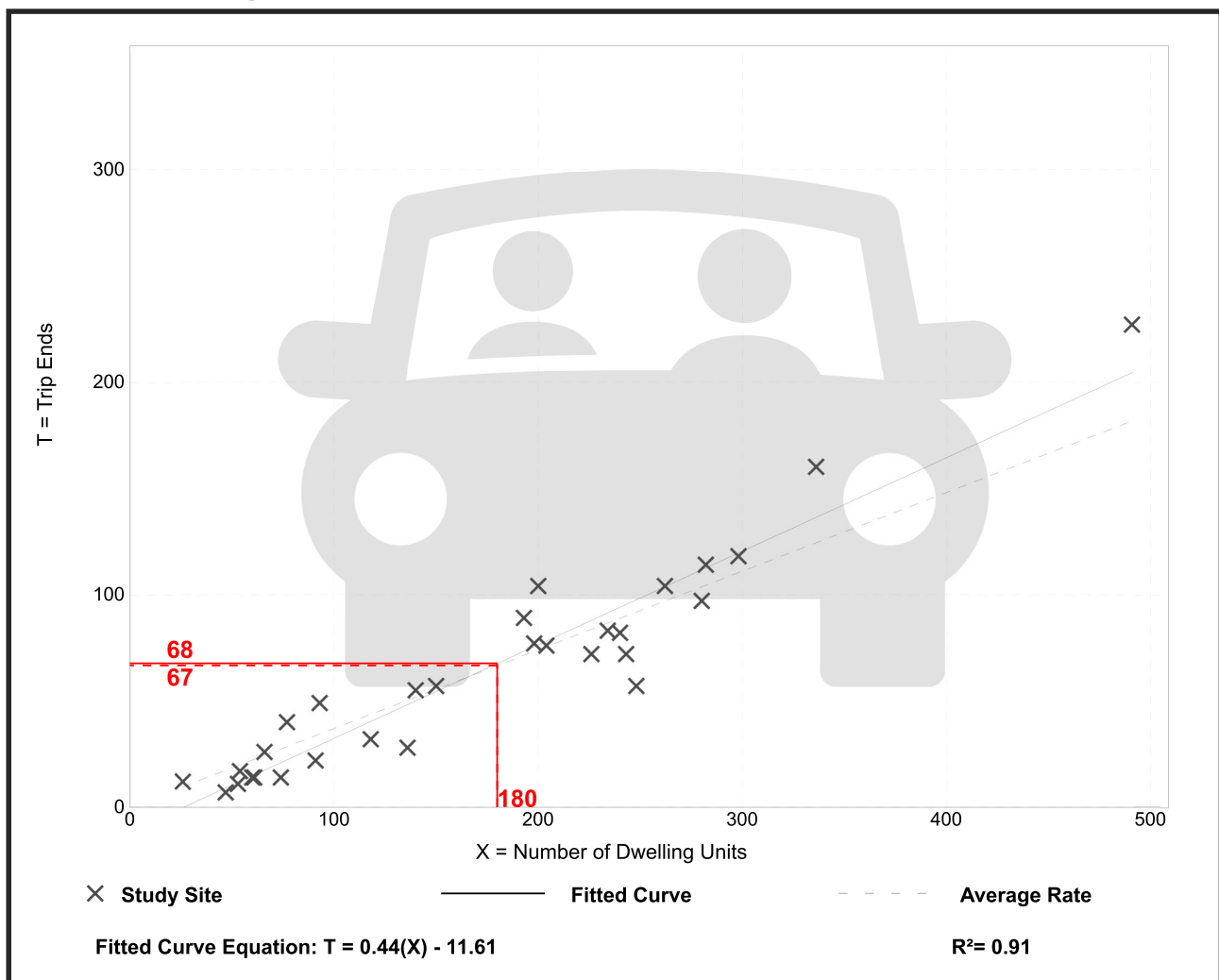
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

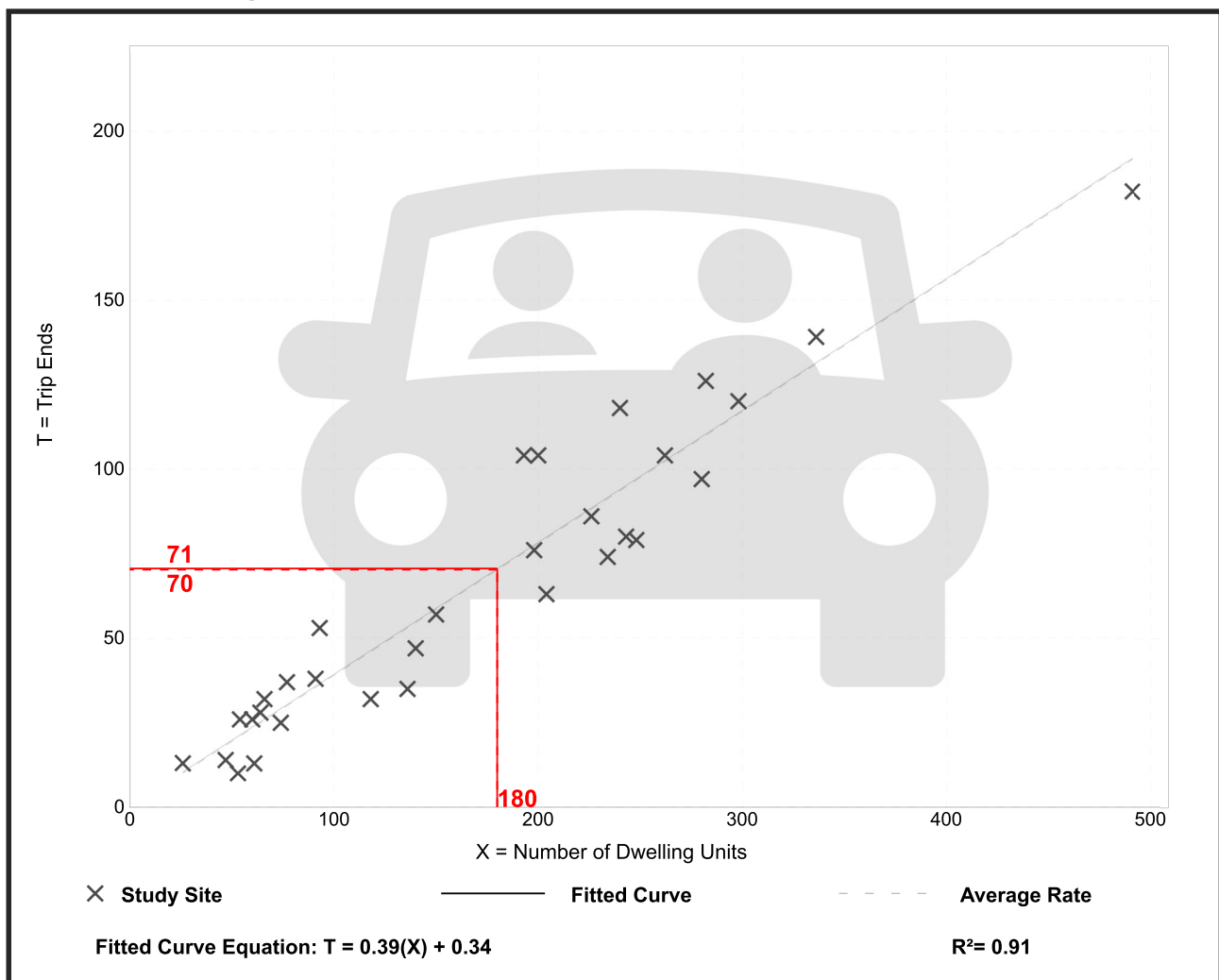
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

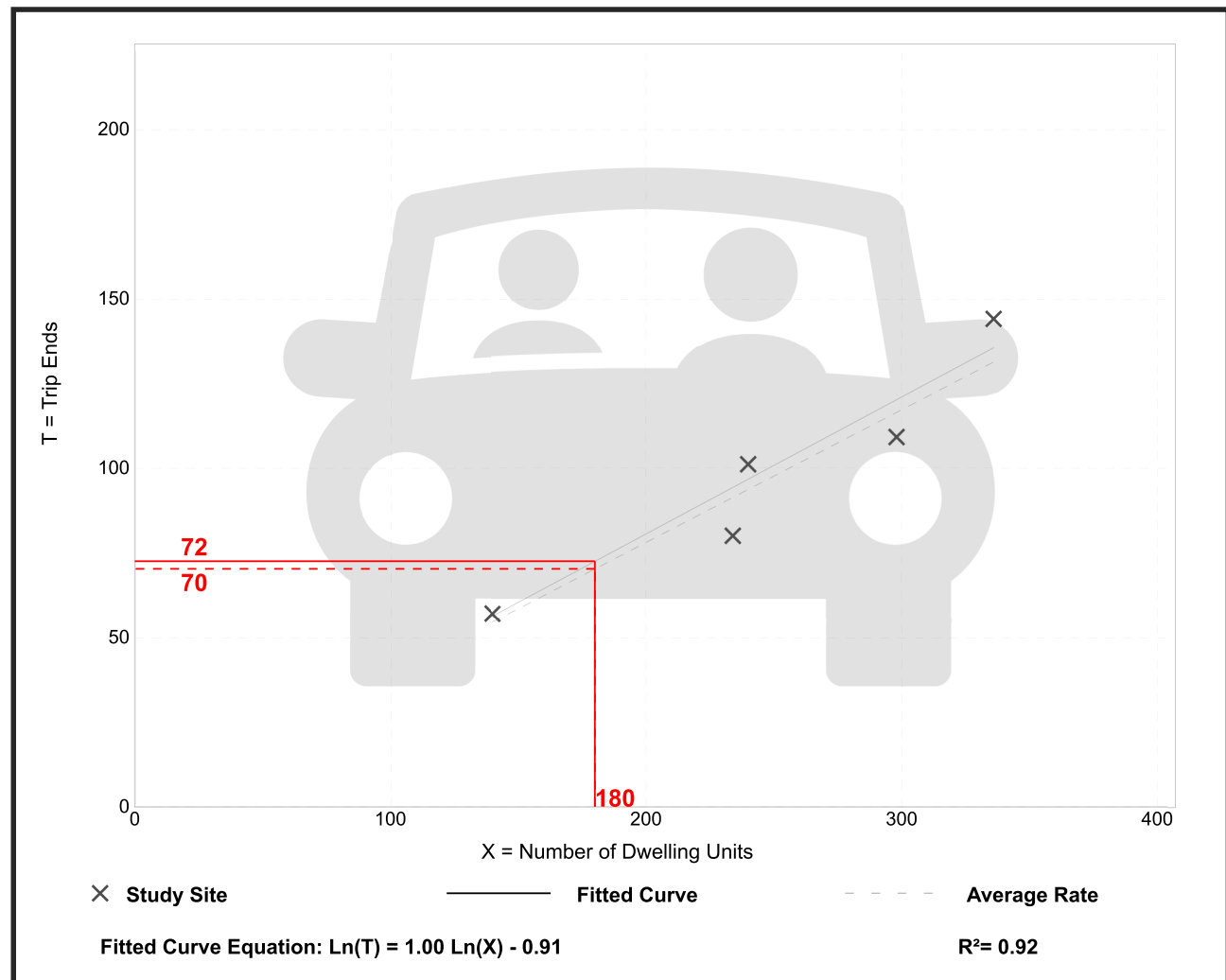
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 250
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.34 - 0.43	0.04

Data Plot and Equation

Caution – Small Sample Size



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	37	1	0	0	13	32	0	1	15	1
Future Volume (vph)	0	0	37	1	0	0	13	32	0	1	15	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.865									0.992	
Flt Protected					0.950		0.950				0.997	
Satd. Flow (prot)	0	1644	0	0	1805	0	1805	3610	0	0	3570	0
Flt Permitted					0.731		0.745				0.952	
Satd. Flow (perm)	0	1644	0	0	1389	0	1416	3610	0	0	3409	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1054									1	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
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%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	40	1	0	0	14	35	0	1	16	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	1	0	14	35	0	0	18	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Existing AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.03			0.00		0.01	0.01			0.01	
Control Delay		0.1			26.0		7.8	7.2			7.5	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		0.1			26.0		7.8	7.2			7.5	
LOS		A			C		A	A			A	
Approach Delay		0.1			26.0			7.3			7.5	
Approach LOS		A			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.03

Intersection Signal Delay: 4.8

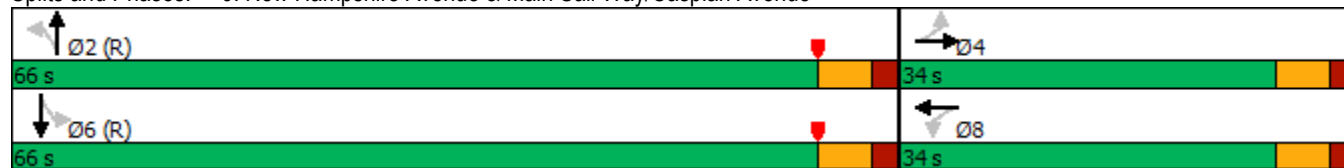
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (vph)	3	1	12	4	0	0	19	60	3	0	90	11
Future Volume (vph)	3	1	12	4	0	0	19	60	3	0	90	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.897						0.993			0.983	
Flt Protected		0.991			0.950		0.950					
Satd. Flow (prot)	0	1689	0	0	1805	0	1805	3453	0	1900	3549	0
Flt Permitted		0.937			0.746		0.683					
Satd. Flow (perm)	0	1597	0	0	1417	0	1298	3453	0	1900	3549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						3			12	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	13	4	0	0	20	65	3	0	97	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	4	0	20	68	0	0	109	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		92.0	92.0			92.0	
Actuated g/C Ratio		0.28			0.28		0.92	0.92			0.92	
v/c Ratio		0.04			0.01		0.02	0.02			0.03	
Control Delay		15.2			26.2		3.9	3.1			2.7	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.2			26.2		3.9	3.1			2.7	
LOS		B			C		A	A			A	
Approach Delay		15.2			26.3			3.3			2.7	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.04

Intersection Signal Delay: 4.4

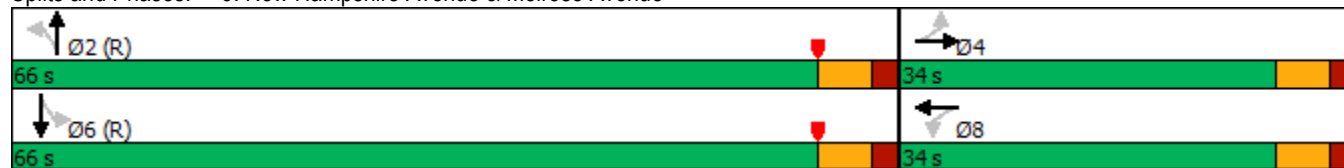
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	4	29	20	0
Future Vol, veh/h	1	0	4	29	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	5	34	24	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	68	12	24	0	-	0
Stage 1	24	-	-	-	-	-
Stage 2	44	-	-	-	-	-
Critical Hdwy	6.6	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	938	1072	1604	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	935	1072	1604	-	-	-
Mov Cap-2 Maneuver	935	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	0.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1604	-	935	-	-	
HCM Lane V/C Ratio	0.003	-	0.001	-	-	
HCM Control Delay (s)	7.3	-	8.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Existing PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕			↕	
Traffic Volume (vph)	0	3	9	4	0	12	28	76	1	1	53	5
Future Volume (vph)	0	3	9	4	0	12	28	76	1	1	53	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.896			0.901			0.998			0.987	
Flt Protected					0.987		0.950				0.999	
Satd. Flow (prot)	0	1702	0	0	1690	0	1805	3603	0	0	3560	0
Flt Permitted					0.906		0.711				0.954	
Satd. Flow (perm)	0	1702	0	0	1551	0	1351	3603	0	0	3399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			33			1			6	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	3	10	5	0	14	32	86	1	1	60	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	19	0	32	87	0	0	67	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Existing PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		92.0	92.0			92.0	
Actuated g/C Ratio		0.28			0.28		0.92	0.92			0.92	
v/c Ratio		0.03			0.04		0.03	0.03			0.02	
Control Delay		15.9			4.9		3.5	2.8			3.1	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.9			4.9		3.5	2.8			3.1	
LOS		B			A		A	A			A	
Approach Delay		15.9			4.9			3.0			3.1	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.04

Intersection Signal Delay: 4.0

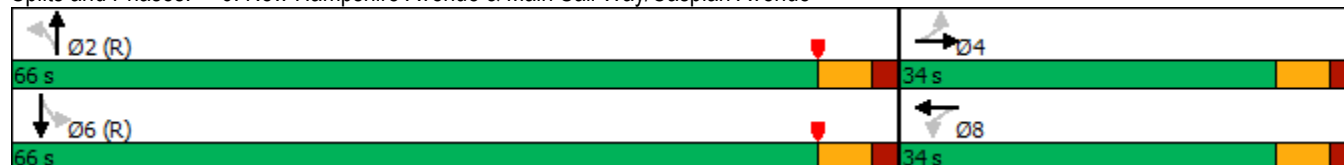
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	19	12	4	0	29	129	20	3	83	20
Future Volume (vph)	5	1	19	12	4	0	29	129	20	3	83	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.896						0.980			0.970	
Flt Protected		0.990			0.964		0.950			0.950		
Satd. Flow (prot)	0	1685	0	0	1832	0	1805	3420	0	1805	3502	0
Flt Permitted		0.942			0.778		0.671			0.636		
Satd. Flow (perm)	0	1604	0	0	1478	0	1275	3420	0	1208	3502	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23						25			25	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	6	1	23	15	5	0	36	159	25	4	102	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	0	0	20	0	36	184	0	4	127	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		84.0	84.0		84.0	84.0	
Actuated g/C Ratio		0.28			0.28		0.84	0.84		0.84	0.84	
v/c Ratio		0.06			0.05		0.03	0.06		0.00	0.04	
Control Delay		13.4			26.8		6.2	4.4		6.7	4.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.4			26.8		6.2	4.4		6.7	4.1	
LOS		B			C		A	A		A	A	
Approach Delay		13.4			26.8			4.7			4.2	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.06

Intersection Signal Delay: 6.3

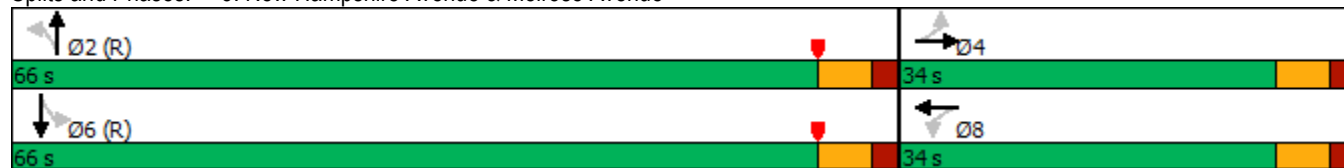
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	3	85	53	7
Future Vol, veh/h	1	5	3	85	53	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	6	3	97	60	8

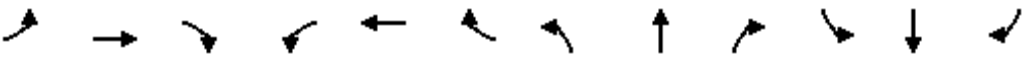
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	167	34	68	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	103	-	-	-	-	-
Critical Hdwy	6.6	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	820	1038	1546	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	818	1038	1546	-	-	-
Mov Cap-2 Maneuver	818	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1546	-	993	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Existing SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕			↕	
Traffic Volume (vph)	3	1	23	7	0	2	16	57	3	0	40	0
Future Volume (vph)	3	1	23	7	0	2	16	57	3	0	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.883			0.973			0.993				
Flt Protected		0.995			0.962		0.950					
Satd. Flow (prot)	0	1669	0	0	1778	0	1805	3585	0	0	3610	0
Flt Permitted		0.974			0.794		0.725					
Satd. Flow (perm)	0	1634	0	0	1468	0	1377	3585	0	0	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			33			3				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	26	8	0	2	18	66	3	0	46	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	0	0	10	0	18	69	0	0	46	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Existing SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		84.0	84.0			84.0	
Actuated g/C Ratio		0.28			0.28		0.84	0.84			0.84	
v/c Ratio		0.06			0.02		0.02	0.02			0.02	
Control Delay		11.9			0.6		5.9	4.8			5.7	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		11.9			0.6		5.9	4.8			5.7	
LOS		B			A		A	A			A	
Approach Delay		11.9			0.6			5.0			5.7	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.06

Intersection Signal Delay: 6.1

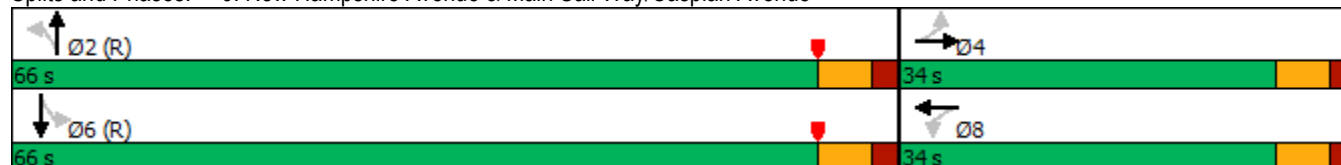
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	25	4	0	0	87	87	17	0	87	16
Future Volume (vph)	11	1	25	4	0	0	87	87	17	0	87	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.909						0.975			0.976	
Flt Protected		0.985			0.950		0.950					
Satd. Flow (prot)	0	1701	0	0	1805	0	1805	3520	0	1900	3523	0
Flt Permitted		0.927			0.731		0.680					
Satd. Flow (perm)	0	1601	0	0	1389	0	1292	3520	0	1900	3523	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27						19			18	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	12	1	27	4	0	0	96	96	19	0	96	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	4	0	96	115	0	0	114	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

Existing SAT
04/14/2025

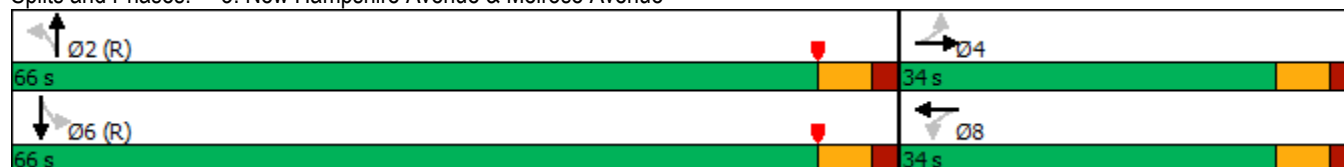
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.09			0.01		0.10	0.04			0.04	
Control Delay		14.2			26.2		7.6	5.9			5.4	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		14.2			26.2		7.6	5.9			5.4	
LOS		B			C		A	A			A	
Approach Delay		14.2			26.3			6.6			5.4	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.10
Intersection Signal Delay: 7.3
Intersection Capacity Utilization 83.3%
Analysis Period (min) 15

Intersection LOS: A
ICU Level of Service E

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	5	56	38	1
Future Vol, veh/h	0	1	5	56	38	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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	6	70	48	1

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	131	25	49	0	-	0
Stage 1	49	-	-	-	-	-
Stage 2	82	-	-	-	-	-
Critical Hdwy	6.6	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	862	1052	1571	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	859	1052	1571	-	-	-
Mov Cap-2 Maneuver	859	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	1052	-	-
HCM Lane V/C Ratio	0.004	-	0.001	-	-
HCM Control Delay (s)	7.3	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build AM

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	39	1	0	0	14	34	0	1	16	1
Future Volume (vph)	0	0	39	1	0	0	14	34	0	1	16	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.865									0.992	
Flt Protected					0.950		0.950				0.997	
Satd. Flow (prot)	0	1644	0	0	1805	0	1805	3610	0	0	3570	0
Flt Permitted					0.730		0.744				0.952	
Satd. Flow (perm)	0	1644	0	0	1387	0	1414	3610	0	0	3409	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1053									1	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
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%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	42	1	0	0	15	37	0	1	17	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	42	0	0	1	0	15	37	0	0	19	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.03			0.00		0.01	0.01			0.01	
Control Delay		0.1			26.0		7.6	7.1			7.5	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		0.1			26.0		7.6	7.1			7.5	
LOS		A			C		A	A			A	
Approach Delay		0.1			26.0			7.2			7.5	
Approach LOS		A			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.03

Intersection Signal Delay: 4.8

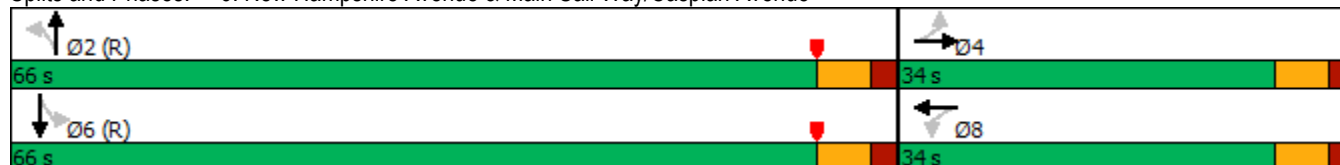
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1	13	4	0	0	20	63	3	0	95	12
Future Volume (vph)	3	1	13	4	0	0	20	63	3	0	95	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.895						0.994			0.983	
Flt Protected		0.992			0.950		0.950					
Satd. Flow (prot)	0	1687	0	0	1805	0	1805	3456	0	1900	3549	0
Flt Permitted		0.940			0.746		0.679					
Satd. Flow (perm)	0	1598	0	0	1417	0	1290	3456	0	1900	3549	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14						3			13	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	14	4	0	0	22	68	3	0	102	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	0	0	4	0	22	71	0	0	115	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		92.0	92.0			92.0	
Actuated g/C Ratio		0.28			0.28		0.92	0.92			0.92	
v/c Ratio		0.04			0.01		0.02	0.02			0.04	
Control Delay		14.8			26.2		4.0	3.1			2.7	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		14.8			26.2		4.0	3.1			2.7	
LOS		B			C		A	A			A	
Approach Delay		14.8			26.3			3.3			2.7	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.04

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	4	30	21	0
Future Vol, veh/h	1	0	4	30	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	5	35	25	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	70	13	25	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.6	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	936	1070	1603	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	933	1070	1603	-	-	-
Mov Cap-2 Maneuver	933	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.9	0.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1603	-	933	-	-	
HCM Lane V/C Ratio	0.003	-	0.001	-	-	
HCM Control Delay (s)	7.3	-	8.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build PM

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	3	9	4	0	13	29	80	1	1	56	5
Future Volume (vph)	0	3	9	4	0	13	29	80	1	1	56	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.896			0.899			0.998			0.987	
Flt Protected					0.988		0.950				0.999	
Satd. Flow (prot)	0	1702	0	0	1688	0	1805	3603	0	0	3560	0
Flt Permitted					0.910		0.708				0.954	
Satd. Flow (perm)	0	1702	0	0	1554	0	1345	3603	0	0	3399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			33			1			6	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	3	10	5	0	15	33	91	1	1	64	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	20	0	33	92	0	0	71	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		92.0	92.0			92.0	
Actuated g/C Ratio		0.28			0.28		0.92	0.92			0.92	
v/c Ratio		0.03			0.04		0.03	0.03			0.02	
Control Delay		15.9			5.2		3.4	2.7			3.0	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.9			5.2		3.4	2.7			3.0	
LOS		B			A		A	A			A	
Approach Delay		15.9			5.2			2.9			3.0	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.04

Intersection Signal Delay: 3.9

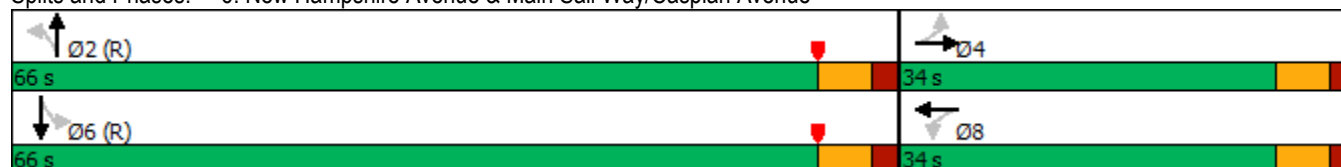
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build PM

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	20	13	4	0	30	136	20	3	87	21
Future Volume (vph)	5	1	20	13	4	0	30	136	20	3	87	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.895						0.981			0.971	
Flt Protected		0.991			0.963		0.950			0.950		
Satd. Flow (prot)	0	1685	0	0	1830	0	1805	3422	0	1805	3505	0
Flt Permitted		0.945			0.771		0.668			0.630		
Satd. Flow (perm)	0	1607	0	0	1465	0	1269	3422	0	1197	3505	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25						25			26	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	6	1	25	16	5	0	37	168	25	4	107	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	21	0	37	193	0	4	133	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		84.0	84.0		84.0	84.0	
Actuated g/C Ratio		0.28			0.28		0.84	0.84		0.84	0.84	
v/c Ratio		0.07			0.05		0.03	0.07		0.00	0.05	
Control Delay		13.1			26.9		6.1	4.4		6.7	4.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.1			26.9		6.1	4.4		6.7	4.1	
LOS		B			C		A	A		A	A	
Approach Delay		13.1			26.9			4.7			4.2	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.07

Intersection Signal Delay: 6.3

Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	3	89	56	7
Future Vol, veh/h	1	5	3	89	56	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	6	3	101	64	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	175	36	72	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.6	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	812	1035	1541	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	1035	1541	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	922	-	-	-	-	-

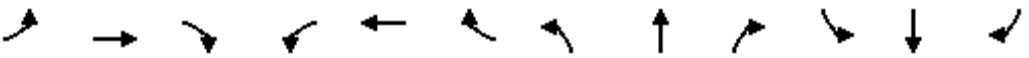
Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1541	-	989	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build SAT

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕			↕	
Traffic Volume (vph)	3	1	14	7	0	3	17	60	3	0	42	0
Future Volume (vph)	3	1	14	7	0	3	17	60	3	0	42	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.892			0.963			0.994				
Flt Protected		0.993			0.965		0.950					
Satd. Flow (prot)	0	1683	0	0	1766	0	1805	3588	0	0	3610	0
Flt Permitted		0.945			0.772		0.724					
Satd. Flow (perm)	0	1602	0	0	1413	0	1376	3588	0	0	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			33			3				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			407			1072			398	
Travel Time (s)		4.3			11.1			29.2			10.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	16	8	0	3	20	69	3	0	48	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	0	11	0	20	72	0	0	48	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

No-Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		92.0	92.0			92.0	
Actuated g/C Ratio		0.28			0.28		0.92	0.92			0.92	
v/c Ratio		0.04			0.03		0.02	0.02			0.01	
Control Delay		14.1			1.6		3.5	2.7			3.4	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		14.1			1.6		3.5	2.7			3.4	
LOS		B			A		A	A			A	
Approach Delay		14.1			1.6			2.9			3.4	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.04

Intersection Signal Delay: 4.3

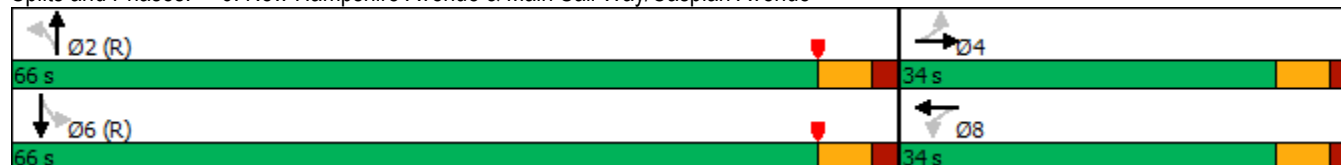
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build SAT

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1	26	4	0	0	91	91	17	0	91	17
Future Volume (vph)	12	1	26	4	0	0	91	91	17	0	91	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.909						0.976			0.976	
Flt Protected		0.985			0.950		0.950					
Satd. Flow (prot)	0	1701	0	0	1805	0	1805	3523	0	1900	3523	0
Flt Permitted		0.925			0.729		0.677					
Satd. Flow (perm)	0	1598	0	0	1385	0	1286	3523	0	1900	3523	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29						19			19	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	13	1	29	4	0	0	100	100	19	0	100	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	43	0	0	4	0	100	119	0	0	119	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
3: New Hampshire Avenue & Melrose Avenue

No-Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.09			0.01		0.10	0.04			0.04	
Control Delay		14.0			26.2		7.5	5.9			5.6	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		14.0			26.2		7.5	5.9			5.6	
LOS		B			C		A	A			A	
Approach Delay		14.0			26.3			6.6			5.6	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.10

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	5	59	40	1
Future Vol, veh/h	0	1	5	59	40	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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	6	74	50	1

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	137	26	51
Stage 1	51	-	-
Stage 2	86	-	-
Critical Hdwy	6.6	6.9	4.1
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	855	1050	1568
Stage 1	971	-	-
Stage 2	942	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	852	1050	1568
Mov Cap-2 Maneuver	852	-	-
Stage 1	967	-	-
Stage 2	942	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1568	-	1050	-	-
HCM Lane V/C Ratio	0.004	-	0.001	-	-
HCM Control Delay (s)	7.3	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	39	27	0	0	14	42	8	1	42	1
Future Volume (vph)	0	0	39	27	0	0	14	42	8	1	42	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.865						0.975			0.997	
Flt Protected					0.950		0.950				0.999	
Satd. Flow (prot)	0	1644	0	0	1805	0	1805	3520	0	0	3596	0
Flt Permitted					0.730		0.724				0.954	
Satd. Flow (perm)	0	1644	0	0	1387	0	1376	3520	0	0	3434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		990						9			1	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			242			1072			398	
Travel Time (s)		4.3			6.6			29.2			10.9	
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%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	42	29	0	0	15	46	9	1	46	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	42	0	0	29	0	15	55	0	0	48	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.04			0.07		0.01	0.02			0.02	
Control Delay		0.1			27.3		7.4	5.9			7.2	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		0.1			27.3		7.4	5.9			7.2	
LOS		A			C		A	A			A	
Approach Delay		0.1			27.3			6.3			7.2	
Approach LOS		A			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.07

Intersection Signal Delay: 8.3

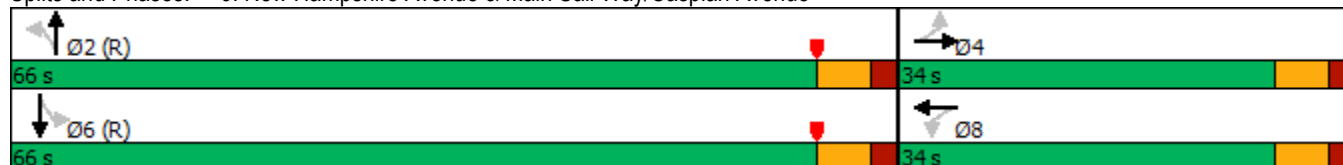
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

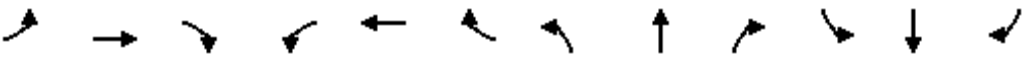


Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build AM

04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (vph)	6	1	13	4	0	0	20	76	3	0	136	23
Future Volume (vph)	6	1	13	4	0	0	20	76	3	0	136	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.910						0.995			0.978	
Flt Protected		0.986			0.950		0.950					
Satd. Flow (prot)	0	1705	0	0	1805	0	1805	3458	0	1900	3531	0
Flt Permitted		0.924			0.744		0.644					
Satd. Flow (perm)	0	1598	0	0	1414	0	1224	3458	0	1900	3531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14						3			25	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	6	1	14	4	0	0	22	82	3	0	146	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	4	0	22	85	0	0	171	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build AM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		84.0	84.0			84.0	
Actuated g/C Ratio		0.28			0.28		0.84	0.84			0.84	
v/c Ratio		0.05			0.01		0.02	0.03			0.06	
Control Delay		15.8			26.2		6.4	5.2			3.8	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.8			26.2		6.4	5.2			3.8	
LOS		B			C		A	A			A	
Approach Delay		15.8			26.3			5.4			3.8	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.06
 Intersection Signal Delay: 5.5
 Intersection Capacity Utilization 83.3%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service E

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue

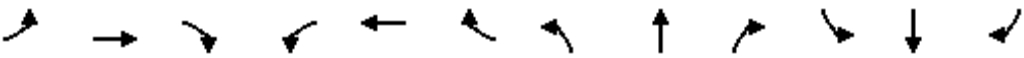


Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↵	↕			↕	
Traffic Vol, veh/h	1	0	0	26	0	0	4	30	8	0	21	0
Future Vol, veh/h	1	0	0	26	0	0	4	30	8	0	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	92	85	92	92	92	85	85	92	92	85	85
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	1	0	0	28	0	0	5	35	9	0	25	0
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	53	79	13	63	75	22	25	0	0	44	0	0
Stage 1	25	25	-	50	50	-	-	-	-	-	-	-
Stage 2	28	54	-	13	25	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	945	811	1070	924	815	1050	1603	-	-	1563	-	-
Stage 1	995	874	-	957	853	-	-	-	-	-	-	-
Stage 2	991	849	-	1005	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	943	809	1070	922	813	1050	1603	-	-	1563	-	-
Mov Cap-2 Maneuver	943	809	-	922	813	-	-	-	-	-	-	-
Stage 1	992	874	-	954	850	-	-	-	-	-	-	-
Stage 2	988	846	-	1005	874	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	8.8			9			0.7			0		
HCM LOS	A			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1603	-	-	943	922	1563	-	-				
HCM Lane V/C Ratio	0.003	-	-	0.001	0.031	-	-	-				
HCM Control Delay (s)	7.3	-	-	8.8	9	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

Intersection						
Int Delay, s/veh	7.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	1	1	0	0	26
Future Vol, veh/h	8	1	1	0	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	1	0	0	28
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1	0	-	0	20	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	997	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	991	1084
Mov Cap-2 Maneuver	-	-	-	-	991	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1004	-
Approach	EB	WB		SB		
HCM Control Delay, s	6.4	0		8.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1622	-	-	-	1084	
HCM Lane V/C Ratio	0.005	-	-	-	0.026	
HCM Control Delay (s)	7.2	0	-	-	8.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

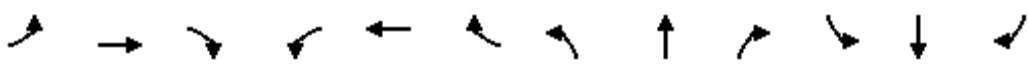
Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕			↕	
Traffic Volume (vph)	0	3	9	18	0	13	29	102	22	1	70	5
Future Volume (vph)	0	3	9	18	0	13	29	102	22	1	70	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.896			0.942			0.973			0.990	
Flt Protected					0.972		0.950				0.999	
Satd. Flow (prot)	0	1702	0	0	1740	0	1805	3513	0	0	3570	0
Flt Permitted					0.852		0.698				0.954	
Satd. Flow (perm)	0	1702	0	0	1525	0	1326	3513	0	0	3410	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			33			25			6	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		156			269			1072			398	
Travel Time (s)		4.3			7.3			29.2			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	3	10	20	0	15	33	116	25	1	80	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	13	0	0	35	0	33	141	0	0	87	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.03			0.08		0.03	0.05			0.03	
Control Delay		15.9			10.5		7.0	5.1			6.6	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.9			10.5		7.0	5.1			6.6	
LOS		B			B		A	A			A	
Approach Delay		15.9			10.5			5.5			6.6	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.08

Intersection Signal Delay: 6.8

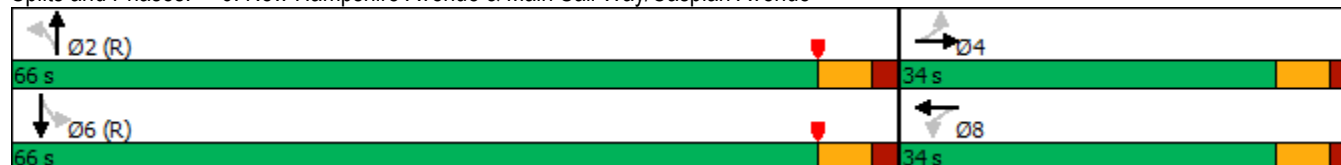
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	20	13	4	0	30	174	20	3	106	30
Future Volume (vph)	10	1	20	13	4	0	30	174	20	3	106	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.911						0.984			0.967	
Flt Protected		0.984			0.963		0.950			0.950		
Satd. Flow (prot)	0	1703	0	0	1830	0	1805	3429	0	1805	3491	0
Flt Permitted		0.920			0.812		0.646			0.603		
Satd. Flow (perm)	0	1592	0	0	1543	0	1227	3429	0	1146	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25						22			37	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Adj. Flow (vph)	12	1	25	16	5	0	37	215	25	4	131	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	38	0	0	21	0	37	240	0	4	168	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build PM
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0		76.0	76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76		0.76	0.76	
v/c Ratio		0.08			0.05		0.04	0.09		0.00	0.06	
Control Delay		14.4			26.8		7.7	6.0		8.0	5.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		14.4			26.8		7.7	6.0		8.0	5.0	
LOS		B			C		A	A		A	A	
Approach Delay		14.4			26.8			6.3			5.0	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.09

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



HCM 2010 TWSC
10: New Hampshire Avenue & Parkside Avenue/Site Driveway

Build PM
04/14/2025

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	1	0	5	14	0	0	3	89	22	0	56	7
Future Vol, veh/h	1	0	5	14	0	0	3	89	22	0	56	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	92	88	92	92	92	88	88	92	92	88	88
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	1	0	6	15	0	0	3	101	24	0	64	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	125	199	36	151	191	63	72	0	0	125	0	0
Stage 1	68	68	-	119	119	-	-	-	-	-	-	-
Stage 2	57	131	-	32	72	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	842	696	1035	802	703	988	1541	-	-	1459	-	-
Stage 1	940	838	-	873	796	-	-	-	-	-	-	-
Stage 2	954	787	-	980	834	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	841	695	1035	796	702	988	1541	-	-	1459	-	-
Mov Cap-2 Maneuver	841	695	-	796	702	-	-	-	-	-	-	-
Stage 1	938	838	-	871	794	-	-	-	-	-	-	-
Stage 2	952	785	-	975	834	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.6		9.6		0.2		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1541	-	-	997 796	1459	-	-
HCM Lane V/C Ratio	0.002	-	-	0.007 0.019	-	-	-
HCM Control Delay (s)	7.3	-	-	8.6 9.6	0	-	-
HCM Lane LOS	A	-	-	A A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0 0.1	0	-	-

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	5	17	0	0	14
Future Vol, veh/h	21	5	17	0	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	5	18	0	0	15
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	18	0	-	0	69	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	936	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	923	1061
Mov Cap-2 Maneuver	-	-	-	-	923	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	971	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.9	0		8.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1599	-	-	-	1061	
HCM Lane V/C Ratio	0.014	-	-	-	0.014	
HCM Control Delay (s)	7.3	0	-	-	8.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1	24	24	0	3	17	79	21	0	60	0
Future Volume (vph)	3	1	24	24	0	3	17	79	21	0	60	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.882			0.987			0.969				
Flt Protected		0.995			0.957		0.950					
Satd. Flow (prot)	0	1667	0	0	1795	0	1805	3498	0	0	3610	0
Flt Permitted		0.973			0.723		0.710					
Satd. Flow (perm)	0	1631	0	0	1356	0	1349	3498	0	0	3610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			33			24				
Link Speed (mph)		25			25			25				25
Link Distance (ft)		156			255			1072				398
Travel Time (s)		4.3			7.0			29.2				10.9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	1	28	28	0	3	20	91	24	0	69	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	31	0	20	115	0	0	69	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
Number of Detectors	1	0		1	0		0	0		1	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	-10		0	-10		0	0		0	0	
Detector 1 Size(ft)	20	50		20	50		40	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA			NA	
Protected Phases		4			8			2				6
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings
6: New Hampshire Avenue & Main Sail Way/Caspian Avenue

Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		84.0	84.0			84.0	
Actuated g/C Ratio		0.28			0.28		0.84	0.84			0.84	
v/c Ratio		0.07			0.08		0.02	0.04			0.02	
Control Delay		11.7			9.4		5.8	3.8			5.5	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		11.7			9.4		5.8	3.8			5.5	
LOS		B			A		A	A			A	
Approach Delay		11.7			9.4			4.1			5.5	
Approach LOS		B			A			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.08

Intersection Signal Delay: 6.0

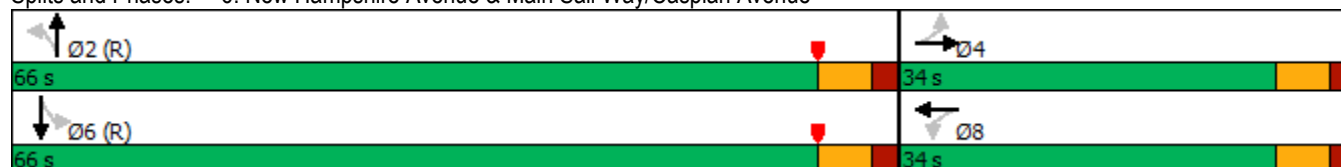
Intersection LOS: A

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

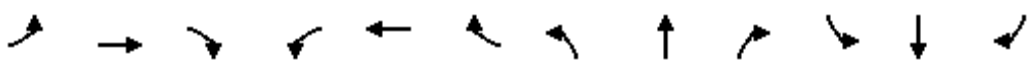
Splits and Phases: 6: New Hampshire Avenue & Main Sail Way/Caspian Avenue



Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (vph)	18	1	26	4	0	0	91	122	17	0	110	33
Future Volume (vph)	18	1	26	4	0	0	91	122	17	0	110	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.922						0.981			0.966	
Flt Protected		0.980			0.950		0.950					
Satd. Flow (prot)	0	1717	0	0	1805	0	1805	3541	0	1900	3487	0
Flt Permitted		0.894			0.724		0.652					
Satd. Flow (perm)	0	1566	0	0	1376	0	1239	3541	0	1900	3487	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29						19			36	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		217			267			240			1072	
Travel Time (s)		5.9			7.3			6.5			29.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	1	29	4	0	0	100	134	19	0	121	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	50	0	0	4	0	100	153	0	0	157	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
Number of Detectors	1	0		1	0		0	0		0	0	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	0		20	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Minimum Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	

Lanes, Volumes, Timings

3: New Hampshire Avenue & Melrose Avenue

Build SAT
04/14/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	34.0	34.0		34.0	34.0		66.0	66.0		66.0	66.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		66.0%	66.0%		66.0%	66.0%	
Maximum Green (s)	28.0	28.0		28.0	28.0		60.0	60.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		28.0			28.0		76.0	76.0			76.0	
Actuated g/C Ratio		0.28			0.28		0.76	0.76			0.76	
v/c Ratio		0.11			0.01		0.11	0.06			0.06	
Control Delay		15.2			26.2		7.6	5.9			4.8	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		15.2			26.2		7.6	5.9			4.8	
LOS		B			C		A	A			A	
Approach Delay		15.2			26.3			6.6			4.8	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 16.5 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.11

Intersection Signal Delay: 7.1

Intersection LOS: A

Intersection Capacity Utilization 109.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: New Hampshire Avenue & Melrose Avenue



Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	0	0	1	18	0	0	5	59	19	0	30	1
Future Vol, veh/h	0	0	1	18	0	0	5	59	19	0	30	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	92	80	92	92	92	80	80	92	92	80	80
Heavy Vehicles, %	0	2	0	2	2	2	0	0	2	2	0	0
Mvmt Flow	0	0	1	20	0	0	6	74	21	0	38	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	88	146	20	116	136	48	39	0	0	95	0	0
Stage 1	39	39	-	97	97	-	-	-	-	-	-	-
Stage 2	49	107	-	19	39	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.9	7.54	6.54	6.94	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.3	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	893	744	1060	848	754	1011	1584	-	-	1497	-	-
Stage 1	977	862	-	899	814	-	-	-	-	-	-	-
Stage 2	964	806	-	997	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	890	741	1060	845	751	1011	1584	-	-	1497	-	-
Mov Cap-2 Maneuver	890	741	-	845	751	-	-	-	-	-	-	-
Stage 1	973	862	-	895	811	-	-	-	-	-	-	-
Stage 2	960	803	-	996	862	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.4		9.4		0.5		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1584	-	-	1060	845	1497	-
HCM Lane V/C Ratio	0.004	-	-	0.001	0.023	-	-
HCM Control Delay (s)	7.3	-	-	8.4	9.4	0	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	4	10	0	0	17
Future Vol, veh/h	18	4	10	0	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	4	11	0	0	18
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	11	0	-	0	55	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	44	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1608	-	-	-	953	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	978	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1608	-	-	-	942	1070
Mov Cap-2 Maneuver	-	-	-	-	942	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	978	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.9	0		8.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1608	-	-	-	1070	
HCM Lane V/C Ratio	0.012	-	-	-	0.017	
HCM Control Delay (s)	7.3	0	-	-	8.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	