

TRAFFIC IMPACT STUDY

For

MPB Realty, LLC



Proposed Popeye's & IHOP Restaurants

Property Located at:

470 Eagle Rock Avenue (CR 611)
Block 153 – Lot 38
Township of West Orange, Essex County, NJ

Prepared by:



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October 21, 2022

Last Revised: December 04, 2025

1021-99-025T

INTRODUCTION

It is proposed to reoccupy a vacated restaurant known as “China Gourmet” with a 2,391 SF Popeye’s fast food restaurant with drive-thru and a 3,797 SF IHOP high-turnover sit-down restaurant on a parcel of land located along the south side of Eagle Rock Avenue just east of Rosney Terrace in the Township of West Orange, Essex County, New Jersey, see Figure 1, in Appendix A. The site is designated as Block 153 – Lot 38 on the Township Tax Maps. Access to the site is currently provided via two (2) full movement driveways along Eagle Rock Avenue. It is proposed to re-construct the existing driveways to provide one (1) full movement driveway and one (1) full movement ingress/right turn egress driveway along Eagle Rock Avenue. Parking will be provided via forty-eight (48) on-site parking spaces.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Existing traffic data was collected via manual turning movement (MTM) counts during the weekday AM, weekday PM and Saturday midday peak periods at the following intersections:
 - Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway
 - Eagle Rock Avenue and Woodhull Avenue/ Whole Foods Driveway
 - Eagle Rock Avenue and Prospect Avenue
- Projections of traffic to be generated by the proposed development were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution.
- Capacity analyses were conducted for the Existing, No Build, and Build conditions for the study intersections.
- The proposed points of ingress and egress were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The site plan as designed was reviewed for sufficiency in accommodating large wheel base vehicles such as delivery trucks, refuse trucks, and emergency vehicles.
- The parking layout and supply was assessed based on accepted design standards and demand experienced at similar developments.

EXISTING CONDITIONS

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

Prospect Avenue (CR 577) is an Urban Principal Arterial roadway under the jurisdiction of Essex County. In the vicinity of the site the posted speed limit is 35 MPH and the roadway provides two travel lane in each direction with a two-way center left-turn lane along the West Orange Plaza frontage. The roadway provides a general north/south orientation. Curb is provided along both sides of the roadway. Sidewalk is provided along both sides of the roadway south of the intersection with Eagle Rock Avenue (CR 611). Prospect Avenue provides a curved horizontal alignment and rolling vertical alignment. The land uses along Prospect Avenue in the vicinity of The Project are a mix of residential and commercial.

Eagle Rock Avenue (CR 611) is an Urban Minor Arterial roadway under the jurisdiction of Essex County. In the vicinity of the site the posted speed limit is 35 MPH and the roadway provides two travel lanes in each direction with a general east/west orientation. Curb is provided along both sides of the roadway and sidewalk is provided along the south side of the roadway. Eagle Rock Avenue provides a curved horizontal alignment and a rolling vertical alignment. The land uses along Eagle Rock Avenue in the vicinity of The Project are primarily commercial to the east and primarily residential to the west.

Rosney Terrace is a local roadway under the jurisdiction of the Township of West Orange. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction with a general north/south orientation. Curb is provided along both sides of the roadway while sidewalk is not provided along either side of the roadway. Rosney Terrace provides a straight horizontal alignment and an uphill vertical alignment from south to north. The land uses along Rosney Terrace in the vicinity of The Project are primarily residential.

Woodhull Avenue is a local roadway under the jurisdiction of the Township of West Orange. In the vicinity of the site the posted speed limit is not posted and the roadway provides one travel lane in each direction with a general north/south orientation. Curb and sidewalk are provided along both sides of the roadway. Woodhull Avenue provides a straight horizontal alignment and a flat vertical alignment. The land uses along Woodhull Avenue in the vicinity of The Project are primarily residential.

Existing Traffic Volumes

Manual turning movement (MTM) counts were originally conducted on Saturday, May 22, 2021 between 11:00 AM – 2:00 PM and on Wednesday, May 26, 2021 between 4:30 – 6:30 PM at the intersection of Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway.

It should be noted that traffic impacts associated with the COVID-19 pandemic may have still been in effect as of the time of the traffic counts. As a result, the collected traffic volumes on the surrounding roadways may not be representative of “existing” traffic conditions. Therefore, historical traffic volume data has been reviewed and compared with current traffic conditions.

Additional MTM counts were conducted on Tuesday, June 13, 2023 between 7:00 – 9:00 AM and between 4:30 – 6:30 PM, on Saturday, June 17, 2023 between 11:00 AM – 2:00 PM, on Tuesday, April 16, 2024 between 4:30 – 6:30 PM and on Saturday, April 20, 2024 between 11:00 AM – 2:00 PM at the intersection of Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway.

The 2021 and 2023 counts were increased to better represent existing 2024 traffic volumes by applying a growth rate of 2% per year obtained from the NJDOT Annual Background Growth Rate Table for April 2019 – April 2021, which remained in effect until November 2023, for a period of years (4) years and two (2) years, respectively. It should be noted that the current NJDOT Annual Background Growth Rate Table utilizes a growth rate of 1.75% for the study roadways; however, in an effort to remain conservative, the previous growth rate of 2% was utilized. The grown 2021 and 2023 traffic volumes were then compared to the 2024 traffic counts as summarized in Table 1 below.

**Table 1
Traffic Count Comparison**

Location	Date	Eagle Rock Ave Peak Hour Traffic Volume					
		As-Counted			With Background Growth		
		AM	PM	SAT	AM	PM	SAT
Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway	May 2021	N/A	948	914	N/A	1,006	970
	June 2023	875	984	967	893	1,004	986
	April 2024	999	1,072	891	999	1,072	891

As seen above, the April 2024 traffic volumes were found to be higher than the historical volumes (May 2021 and June 2023 counts) grown to the current year during the weekday morning and weekday evening peak hour. However, the historical June 2023 counts grown to the current year were found to be higher than the current traffic volumes during the Saturday midday peak hour. Therefore, the April 2024 traffic volumes were utilized in the weekday morning and weekday evening peak hour analyses, while the June 2023 traffic volumes grown to the current year were utilized in the Saturday midday peak hour analysis.

Additional MTM counts were conducted on Tuesday, November 18, 2025 between 7:00 – 9:00 AM and between 4:00 – 6:30 PM and on Saturday, November 8, 2025 between 11:00 AM – 2:00 PM at the intersections of Eagle Rock Avenue and Woodhull Avenue/ Whole Foods Driveway and Eagle Rock Avenue and Prospect Avenue.

Review of the collected traffic data reveals the following peak street hours (PSH) for the each studied intersection:

- Eagle Rock Avenue And Rosney Terrace/Mayfair Farms Driveway:
 - The weekday morning PSH occurs between 8:00 – 9:00 AM
 - The weekday evening PSH occurs between 5:15 – 6:15 PM
 - The Saturday midday PSH occurs between 12:30 – 1:30 PM
- Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway:
 - The weekday morning PSH occurs between 7:15 – 8:15 AM
 - The weekday evening PSH occurs between 4:45 – 5:45 PM
 - The Saturday midday PSH occurs between 12:30 – 1:30 PM
- Eagle Rock Avenue and Prospect Avenue:
 - The weekday morning PSH occurs between 7:45 – 8:45 AM
 - The weekday evening PSH occurs between 5:00 – 6:00 PM
 - The Saturday midday PSH occurs between 12:45 – 1:45 PM

Figure 2, located in Appendix A, shows the adjusted existing peak hour traffic volumes at the study intersections. All MTM counts are contained in Appendix B.

Existing Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a “qualitative” evaluation of capacity based upon certain “quantitative” calculations related to empirical values, such as traffic volume and intersection control.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal “green time”, turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service “F” range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table 2 describes the level of service ranges for signalized intersections.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table 3 describes the level of service ranges for unsignalized (stop controlled) intersections.

Table 2
Level of Service Criteria
for Signalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	greater than 80.0

Table 3
Level of Service Criteria
for Unsignalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
a	0.0 to 10.0
b	10.1 to 15.0
c	15.1 to 25.0
d	25.1 to 35.0
e	35.1 to 50.0
f	greater than 50.0

Analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles.

All capacity analyses were performed utilizing Synchro 12 software. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis. Table 4 summarizes the existing levels of service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

Table 4
Existing Levels of Service

Intersection	Direction/ Movement		AM PSH	PM PSH	SAT PSH
Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway	WB	L	a (9)	a (9)	a (9)
	NB	LTR	b (14)	c (18)	b (11)
Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway	EB	L	C (30)	D (41)	D (42)
		TR	A (5)	B (11)	A (10)
	WB	LTR	A (3)	A (5)	A (3)
	NB	LTR	C (31)	C (34)	C (33)
	SB	LT	C (33)	D (40)	C (32)
		R	-	A (2)	A (1)
	Overall		A (6)	B (15)	B (13)
Eagle Rock Avenue and Prospect Avenue	EB	LT	E (75)	E (76)	D (50)
		R	C (22)	B (16)	B (15)
	WB	L	E (64)	E (71)	E (74)
		LTR	D (49)	E (58)	E (62)
	NB	L	E (72)	E (60)	E (61)
		T	E (62)	D (50)	D (50)
		R	E (69)	E (80)	C (31)
	SB	L	E (56)	D (46)	D (46)
		TR	E (76)	D (52)	E (56)
	Overall		E (62)	E (61)	D (50)

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

The following are discussions pertaining to each of the existing intersections analyzed.

Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway

Rosney Terrace/the Mayfair Farms Driveway intersect Eagle Rock Avenue to form a an unsignalized four-leg intersection with Rosney Terrace and the Mayfair Farms Driveway under stop control. The eastbound and westbound approaches of Eagle Rock Avenue each provide a shared left turn/through lane and a shared through/right turn lane. The northbound approach of Rosney Terrace provides a shared left turn/through/right turn lane. The southbound approach of the Mayfair Farms Driveway provides a shared left turn/through/right turn lane.

A review of the existing analysis reveals that the individual intersection movements operate at Levels of Service “C” or better during the analyzed peak periods. See Table 4 for the individual movement Levels of Service and delays.

Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway

Woodhull Avenue/Whole Foods Driveway intersect Eagle Rock Avenue to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the Township of West Orange which indicates that a four-phase 65 – 70 second variable background cycle is utilized (the traffic signal timing directive is included in Appendix B).

The eastbound approach of Eagle Rock Avenue provides a dedicated left turn lane, a dedicated through lane, and a shared through/right turn lane. The westbound approach of Eagle Rock Avenue provides a shared left turn/through lane and a shared through/right turn lane. The northbound approach of Woodhull Avenue provides a shared left turn/through/right turn lane. The southbound approach of the Whole Foods Driveway provides a shared left turn/through and a channelized right turn lane.

A review of the existing analysis reveals that the intersection operates at levels of service “B” or better and all movements operate at levels of service “D” or better during the analyzed peak periods. See Table 4 for the individual movement levels of service and delays.

Eagle Rock Avenue and Prospect Avenue

Prospect Avenue intersects Eagle Rock Avenue to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from the Township of West Orange which indicates that a four-phase 130 – 140 second variable background cycle is utilized (the traffic signal timing directive is included in Appendix B).

The eastbound approach of Eagle Rock Avenue provides a shared left turn/through lane, a dedicated through lane, and a dedicated right turn lane. The westbound approach of Eagle Rock Avenue provides a dedicated left turn lane, a shared left turn/though lane, and a shared through/right turn lane. The northbound approach of Prospect Avenue provides a dedicated left turn lane, two (2) dedicated through lanes, and a dedicated right turn lane. The southbound approach of Prospect Avenue provides a dedicated left turn lane, a dedicated through lane, and a shared through/right turn lane.

A review of the existing analysis reveals that the intersection operates at levels of service “E” or better and all movements operate at levels of service “E” or better during the analyzed peak periods. See Table 4 for the individual movement levels of service and delays.

FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. As noted previously, a growth rate for roadways within the study area was obtained from the April 2019 – April 2021 NJDOT Annual Background Growth Rate Table, which indicates a growth rate of 2.00% per year.

It should also be noted that there is one (1) development in the vicinity of the site that had been approved but not yet constructed at the time of the counts that is identified as potential significant traffic generator, described below. The Adjacent Development Traffic Volumes passing the site are shown on Figure 3.

- A proposed expansion to an existing building for use as a Target Store within the West Orange Plaza, located in the northwest quadrant of the intersection of Eagle Rock Avenue and Prospect Avenue, has been approved. Projections of the associated traffic volumes were referenced from the *Traffic Impact Assessment*, last revised May 17, 2023, prepared by Dolan & Dean Consulting Engineers, LLC. It should be noted that Figure 5 in the *Traffic Impact Assessment* was referenced for the PM and Saturday peak street hour trip generation for the proposed development. The *Traffic Impact Assessment* did not analyze the AM peak street hour. To develop traffic generation for the AM peak street hour, our office referenced the Institute of Transportation Engineers (ITE) publication *Trip Generation, 12th Edition* for Land Use Code LUC 155 – High-Cube Fulfillment Center Warehouse and LUC 820 – Shopping Center (>150K).

In addition to the proposed Target and several small retail/restaurant pads, it is proposed to modify the access configuration for the Eagle Rock Avenue driveway to provide dual left turn/through egress lanes. Given that the development is under construction, the proposed access configuration was utilized for the southbound approach of Eagle Rock Avenue & Woodhull Avenue/Whole Foods Driveway in all No Build and Build analyses.

Future No Build traffic volumes were developed by applying the background growth rate of 2.00% for two (2) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figure 4, in Appendix A, shows the No Build traffic volumes.

Traffic Generation

Projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 12th Edition* for Land Use Code (LUC) 932 – High-Turnover Sit-Down Restaurant for the proposed IHOP restaurant and LUC 934 – Fast-Food Restaurant with Drive-Through Window for the proposed Popeye's. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites.

According to studies conducted by ITE, traffic associated with LUCs 932 and 934 is not 100% newly generated. Rather, a portion of the traffic is diverted from the existing traffic stream on the adjacent roadway network. This is because the Popeye's and IHOP restaurants are not destination land uses, instead patrons stop on their way to/from other locations such as home or work. For LUC 932, ITE identifies a 43% passby traffic percentage during the PM peak hours, which is also accepted by NJDOT. It should be noted that a portion of traffic during the AM and Saturday midday peak hours is also anticipated to be passby traffic; however, this effect has not been accounted for to remain conservative. For LUC 934, ITE identifies 50%, 55% and 37% passby traffic percentages during the respective AM, PM and Saturday peak hours, which are also accepted by NJDOT. Table 5 below details the traffic volumes associated with the subject project taking into account the passby credits.

Table 5
Trip Generation Considering Passby Traffic

Land Use	Trip Type	AM PSH			PM PSH			SAT PSH		
		In	Out	Total	In	Out	Total	In	Out	Total
2,391 SF Popeye's Fast-Food Restaurant with Drive-Thru	Total	40	39	79	40	36	76	62	59	121
	Passby	20	20	40	22	20	42	23	22	45
	New (Primary)	20	19	39	18	16	34	39	37	76
3,797 SF IHOP High-Turnover Sit-Down Restaurant	Total	19	15	34	21	14	35	21	21	42
	Passby	-	-	-	9	6	15	-	-	-
	New (Primary)	19	15	34	12	8	20	21	21	42
Total	Total	59	54	113	61	50	111	83	80	163
	Passby	20	20	40	31	26	57	23	22	45
	New (Primary)	39	34	73	30	24	54	60	58	118

As mentioned previously, the site is currently developed with a vacated restaurant which has trip generation potential if re-occupied. Therefore, ITE data for LUC 932 was utilized to project the trip generation associated with the potential re-occupation of the existing use. The following Table 6 compares the trips associated with the proposed use to the trip generation potential of the site.

Table 6
Trip Generation Comparison

Land Use	Trip Type	AM PSH			PM PSH			SAT PSH		
		In	Out	Total	In	Out	Total	In	Out	Total
Existing 6,190 SF Restaurant	Total	31	25	56	35	22	57	35	34	69
	Passby	-	-	-	15	10	25	-	-	-
	New (Primary)	31	25	56	20	12	32	35	34	69
Proposed Popeye's and IHOP Restaurants	Total	59	54	113	61	50	111	83	80	163
	Passby	20	20	40	31	26	57	23	22	45
	New (Primary)	39	34	73	30	24	54	60	58	118
Difference	Total	+28	+29	+57	+26	+28	+54	+48	+46	+94
	Passby	+20	+20	+40	+16	+16	+32	+23	+22	+45
	New (Primary)	+8	+9	+17	+10	+12	+22	+25	+24	+49

As shown in Table 6 above, it is anticipated that 17 additional trips during the weekday morning peak hour, 22 additional trips during the weekday evening peak hour and 49 additional trips during the Saturday midday peak hour are anticipated to access the site that are considered “new” to the adjacent roadway network with the proposed redevelopment compared to the potential reoccupation of the site. However, no credit was taken for the potential use of the site and all trip generation was considered an increase over vacant land. This accounts for a “worst case scenario” from a traffic impact perspective.

Once the magnitude of traffic to be generated by the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Located in Appendix A, Figure 5 illustrates the percent distribution of primary site generated trips, Figure 6 illustrates the primary site generate volumes, Figure 7 illustrates the distribution of passby site generated trips, Figure 8 illustrates the passby site generated volumes, and Figure 9 illustrates the total site generated volumes assigned to the study area network. The site generated volumes were added to the No Build traffic volumes to generate the Build traffic volumes, shown in Figure 10.

Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Build conditions and are summarized in Table 7 below.

**Table 7
Future Levels of Service**

Intersection	Direction/ Movement		AM PSH			PM PSH			SAT PSH		
			No Build	Build	Build w/MIT.	No Build	Build	Build w/MIT.	No Build	Build	Build w/MIT.
Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway	WB	L	a (9)	a (9)	-	a (9)	a (9)	-	a (9)	a (9)	-
	NB	LTR	b (14)	b (13)	-	c (20)	c (18)	-	b (11)	b (11)	-
Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway	EB	L	C (34)	C (34)	-	E (58)	E (58)	-	E (65)	E (65)	-
		TR	A (5)	A (5)	-	A (10)	A (10)	-	A (9)	A (9)	-
	WB	LTR	A (3)	A (3)	-	A (5)	A (5)	-	B (17)	A (2)	-
	NB	LTR	C (31)	C (31)	-	C (34)	C (34)	-	C (33)	C (33)	-
	SB	L	C (32)	C (32)	-	C (33)	C (33)	-	C (32)	C (32)	-
		LT	C (32)	C (32)	-	C (33)	C (33)	-	C (32)	C (32)	-
		R	-	-	-	A (5)	A (5)	-	A (4)	A (4)	-
	Overall		A (6)	A (6)	-	B (15)	B (15)	-	C (20)	B (15)	-
Eagle Rock Avenue and Prospect Avenue	EB	LT	E (80)	F (81)	E (77)	F (83)	F (86)	E (78)	D (50)	D (49)	D (51)
		R	C (25)	C (27)	C (25)	B (16)	B (16)	B (16)	B (14)	B (15)	B (15)
	WB	L	E (70)	E (70)	E (80)	E (75)	E (75)	E (75)	F (84)	F (84)	E (79)
		LTR	D (51)	D (51)	E (56)	E (62)	E (63)	E (63)	E (67)	E (69)	E (65)
	NB	L	E (75)	F (79)	E (77)	E (66)	E (68)	E (72)	E (67)	E (73)	E (73)
		T	E (65)	E (65)	E (63)	D (53)	D (53)	D (52)	D (54)	D (54)	D (53)
		R	F (83)	F (83)	E (79)	F (102)	F (102)	F (101)	D (39)	D (39)	D (38)
	SB	L	E (56)	E (56)	E (56)	D (46)	D (46)	D (47)	D (46)	D (46)	D (46)
		TR	F (85)	F (85)	F (83)	E (56)	E (56)	E (56)	E (65)	E (65)	E (64)
	Overall		E (68)	E (69)	E (69)	E (68)	E (68)	E (67)	E (56)	E (56)	E (55)
Eagle Rock Avenue and East Site Driveway	WB	L	-	a (9)	-	-	a (9)	-	-	a (9)	-
	NB	LR	-	c (17)	-	-	c (18)	-	-	c (18)	-
Eagle Rock Avenue and West Site Driveway	WB	L	-	a (9)	-	-	a (9)	-	-	a (9)	-
	NB	R	-	b (10)	-	-	b (11)	-	-	b (10)	-

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway

With the addition of the site traffic, the individual intersection movements are anticipated to operate at No Build Levels of Service “C” or better during the analyzed peak periods. See Table 7 for the individual movement Levels of Service and delays.

Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway

With the addition of site generated traffic, the intersection is projected to operate at overall intersection levels of service “C” or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at No Build levels of service “E”. See Table 7 for the individual movement levels of service and delays.

Eagle Rock Avenue and Prospect Avenue

With the addition of site generated traffic, the intersection is projected to operate at overall intersection levels of service “E” or better during the analyzed peak hours. Additionally, each movement is anticipated to operate at No Build levels of service “E” or better, with the following exceptions:

- The eastbound left turn/through movement in the AM and PM PSH
- The westbound left turn movement in the Saturday PSH
- The northbound left turn movement in the AM PSH
- The northbound right turn movement in the AM and PM PSH
- The southbound through/right turn movement in the AM PSH.

It should be noted that by reallocating 2 seconds of green time from the westbound right-of-way phase to the eastbound right-of-way phase and 1 second of green time from the southbound right-of-way phase to the northbound left turn movement in the AM PSH, 1 second of green time from the northbound/southbound left turn phase to the eastbound right-of-way phase in the PM PSH, and 1 second of green time from the eastbound right-of-way phase to the westbound right-of-way phase in the Saturday PSH, all movements would operate with levels of service and delay similar to or better than No Build conditions. Note that while the southbound through/right turn movement operates at level of service “F” during the AM PSH, in addition to the northbound right turn movement during the PM PSH, this is observed under No Build conditions and indicate the increased delays are a function of existing traffic volumes.

See Table 7 for the individual movement levels of service and delays.

Eagle Rock Avenue and the East Site Driveway

The east site driveway is proposed to intersect Eagle Rock Avenue to form an unsignalized T-intersection with the site driveway under stop control. The eastbound approach of Eagle Rock Avenue is proposed to provide a dedicated through lane and a shared through/right turn lane. The westbound approach of Eagle Rock Avenue is proposed to provide a shared left turn/through lane and a dedicated through lane. The northbound approach of the site driveway is proposed to provide a single lane for left and right turn movements.

As designed, the individual intersection movements are anticipated to operate at Levels of Service “C” or better during the analyzed peak periods. See Table 7 for the individual movement Levels of Service and delays.

Eagle Rock Avenue and the West Site Driveway

The west site driveway is proposed to intersect Eagle Rock Avenue to form an unsignalized T-intersection with the site driveway under stop control. The eastbound approach of Eagle Rock Avenue is proposed to provide a dedicated through lane and a shared through/right turn lane. The westbound approach of Eagle Rock Avenue is proposed to provide a shared left turn/through lane and a dedicated through lane. The northbound approach of the site driveway is proposed to provide a single lane for right turn movements only.

As designed, the individual intersection movements are anticipated to operate at Levels of Service “B” or better during the analyzed peak periods. See Table 7 for the individual movement Levels of Service and delays.

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via one (1) full movement driveway and one (1) full movement ingress/right turn egress driveway along Eagle Rock Avenue.

The parking lot will be serviced by parking aisles with a minimum width of 24 feet for two-way circulation with 90-degree parking, which meets the Ordinance requirements. These dimensions are also consistent with accepted engineering design standards and as such will adequately accommodate the anticipated site traffic.

The drive-thru lanes will operate in a counterclockwise direction with the ability to stack eight (8) cars in the drive-thru lane for the proposed Popeye's restaurant, which exceeds the Ordinance requirement of six (6) total vehicles for fast food restaurant uses. The drive-thru lane is proposed to be 10 feet wide at the order point and 12 feet wide at the pickup window, which exceeds the Ordinance requirement of 9 feet. Therefore, the proposed drive-thru design will provide more than enough stacking for the maximum anticipated demand and will adequately accommodate the anticipated site traffic. A 12-foot-wide bypass lane will also be provided to ensure adequate and efficient circulation and to ensure that drive-thru queues do not impact on site circulation for patrons who park and walk into the restaurant.

Parking

The Township of West Orange Ordinance sets forth a parking requirement of 1 space per 3 seats or 1 space per 45 SF of floor area available to patrons, whichever is greater. Based on square footage, this equates to a parking requirement of 49 spaces for the proposed 2,170 SF of total restaurant area available to patrons. Based on number of seats, this equates to a parking requirement of 36 spaces for the proposed 106 total seats. As such, the requirement of 49 spaces based on square footage was utilized. It is proposed to construct 48 parking spaces, inclusive of one (1) electric vehicle charging spaces and two (2) ADA-accessible spaces. In accordance with the New Jersey Electric Vehicle Supply/Service Equipment (EVSE) parking requirements, at least one electric vehicle charging or "make-ready" space is required for a commercial parking lot containing between 0 and 50 parking spaces, which is satisfied as designed. Additionally, electric vehicle charging stations count as two spaces for the purpose of complying with parking supply requirements, up to a maximum of 10% of the requirement. As such, the effective proposed parking supply is calculated to be 49 spaces, which satisfies the Ordinance requirement.

It is proposed to provide parking stalls with dimensions of 9'x18' for 90-degree parking which meets the minimum Ordinance requirements. It should also be noted that industry standards recommend stall widths of between 8'9" and 9' and a length of 18' for high-turnover land uses such as The Project, which is met as designed.

Popeye's Operational Data

Our office conducted operational characteristic studies at two nearby Popeye's locations to gather information regarding trip generation, parking turnover, and drive-through queue lengths. Both studies were conducted on Thursday, November 13, 2025, from 12:00 – 2:00 PM and from 4:30 – 7:00 PM and on Saturday, November 8, 2025, from 12:00 – 3:00 PM. The two study locations are as follows:

- 372 Central Avenue, East Orange, NJ
- 929 S Orange Avenue, East Orange, NJ

The tables below summarize the parking accumulation and maximum queueing demand:

Table 8
Parking Accumulation

Location	Type	Weekday Midday	Weekday PM	Saturday
Site #1 – 372 Central Avenue (±2,960 SF)	Peak Demand	9	11	8
	Rate/1,000 SF	3.04	3.72	2.70
Site #2 – 929 S Orange Avenue (±2,445 SF)	Peak Demand	7	5	9
	Rate/1,000 SF	2.86	2.05	3.68
Average	Peak Demand	8	8	9
	Rate/1,000 SF	2.96	2.96	3.33

Table 9
Maximum Queueing Demand

Location	Weekday Midday	Weekday PM	Saturday
Site #1 – 372 Central Avenue (±2,960 SF)	4	5	5
Site #2 – 929 S Orange Avenue (±2,445 SF)	4	4	3
Average Queue	4		

The field data indicates that the proposed drive-through to support 8 stacked vehicles is sufficient to accommodate the anticipated demand. Copies of the operational data are included in Appendix D.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

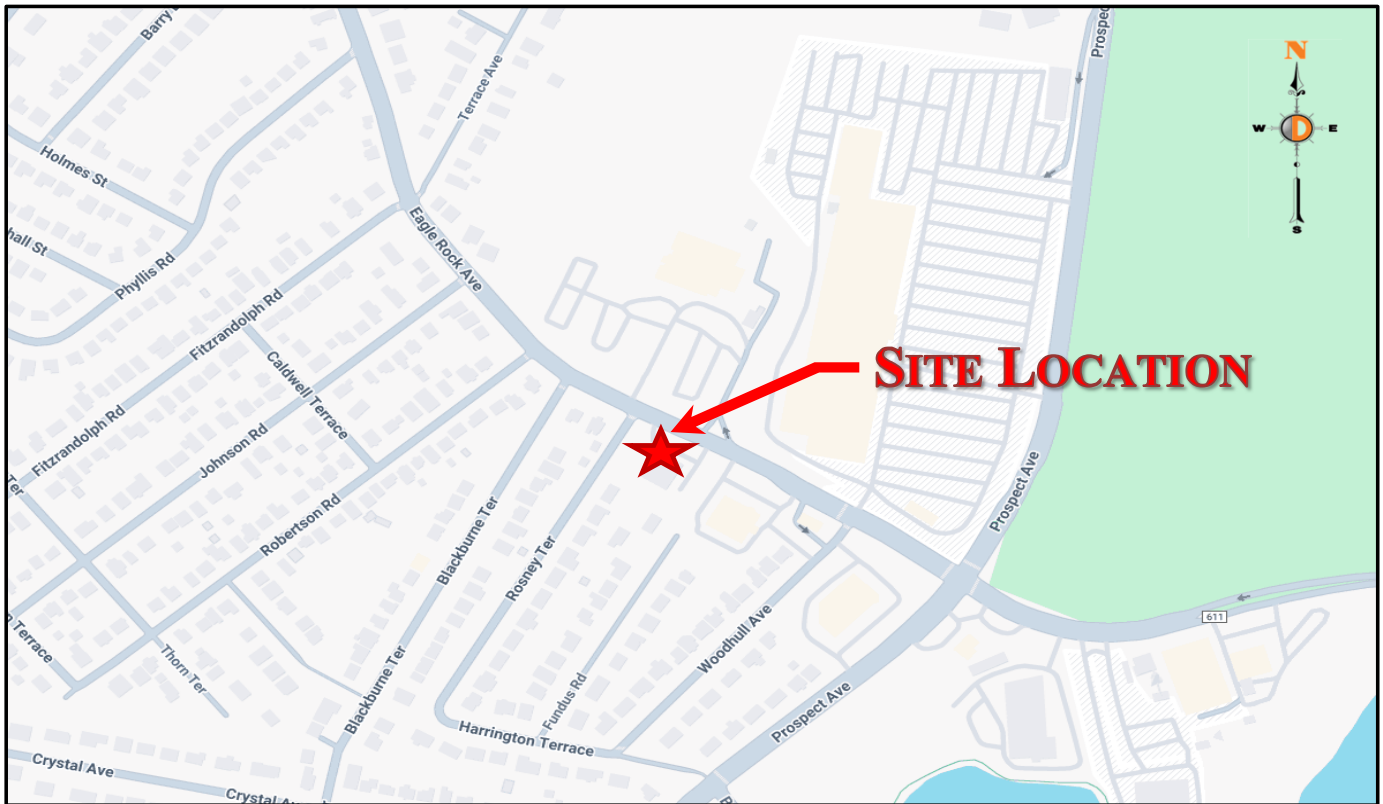
- The proposed 2,391 SF Popeye's and 3,797 SF IHOP restaurants are projected to generate 39 entering trips and 34 exiting trips during the weekday evening peak hour, 30 entering trips and 24 exiting trips during the weekday evening peak hour and 60 entering trips and 58 exiting trips during the Saturday midday peak hour that are "new" to the adjacent roadway network.
- Access to the site will be provided via one (1) full movement driveway and one (1) full movement ingress/right turn egress driveway along Eagle Rock Avenue.
- With the addition of the site generated traffic, the individual intersection movements of Eagle Rock Avenue and Rosney Terrace/Mayfair Farms Driveway are anticipated to operate at No Build Levels of Service "C" or better during the studied peak hours.
- With the addition of the site generated traffic, the individual intersection movements of Eagle Rock Avenue and Woodhull Avenue/Whole Foods Driveway are anticipated to operate at No Build Levels of Service "E" or better during the studied peak hours.
- With the addition of the site generated traffic and signal timing adjustments, the individual intersection movements of Eagle Rock Avenue and Prospect Avenue are anticipated to operate at No Build Levels of Service "E" or better during the studied peak hours, with the exception of the southbound through/right turn movement during the AM PSH and the northbound right turn movement during the PM PSH which will continue to operate at No Build levels of service "F".
- As designed, the individual intersection movements of Eagle Rock Avenue and the east site driveway are anticipated to operate at Levels of Service "C" or better during the studied peak hours.
- As designed, the individual intersection movements of Eagle Rock Avenue and the west site driveway are anticipated to operate at Levels of Service "B" or better during the studied peak hours.
- As proposed, The Project's site driveways and internal circulation have been designed to provide for safe and efficient movement of automobiles.
- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Ordinance requirement.

Conclusions

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the Township of West Orange and Essex County will not experience any significant degradation in operating conditions with the construction of The Project. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

Appendix A

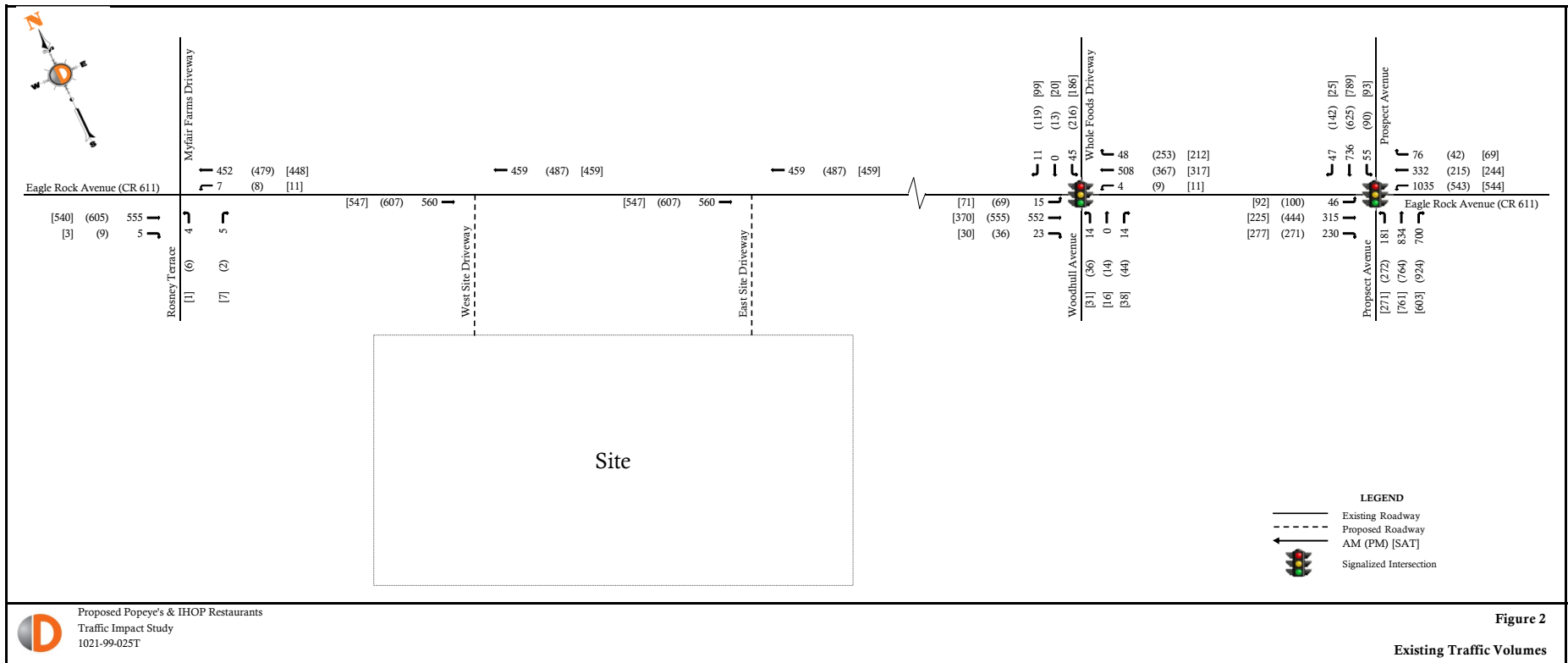
Traffic Volume Figures



Proposed Popeye's & IHOP Restaurants
Traffic Impact Study
1021-99-025T

Figure 1

Site Location Map



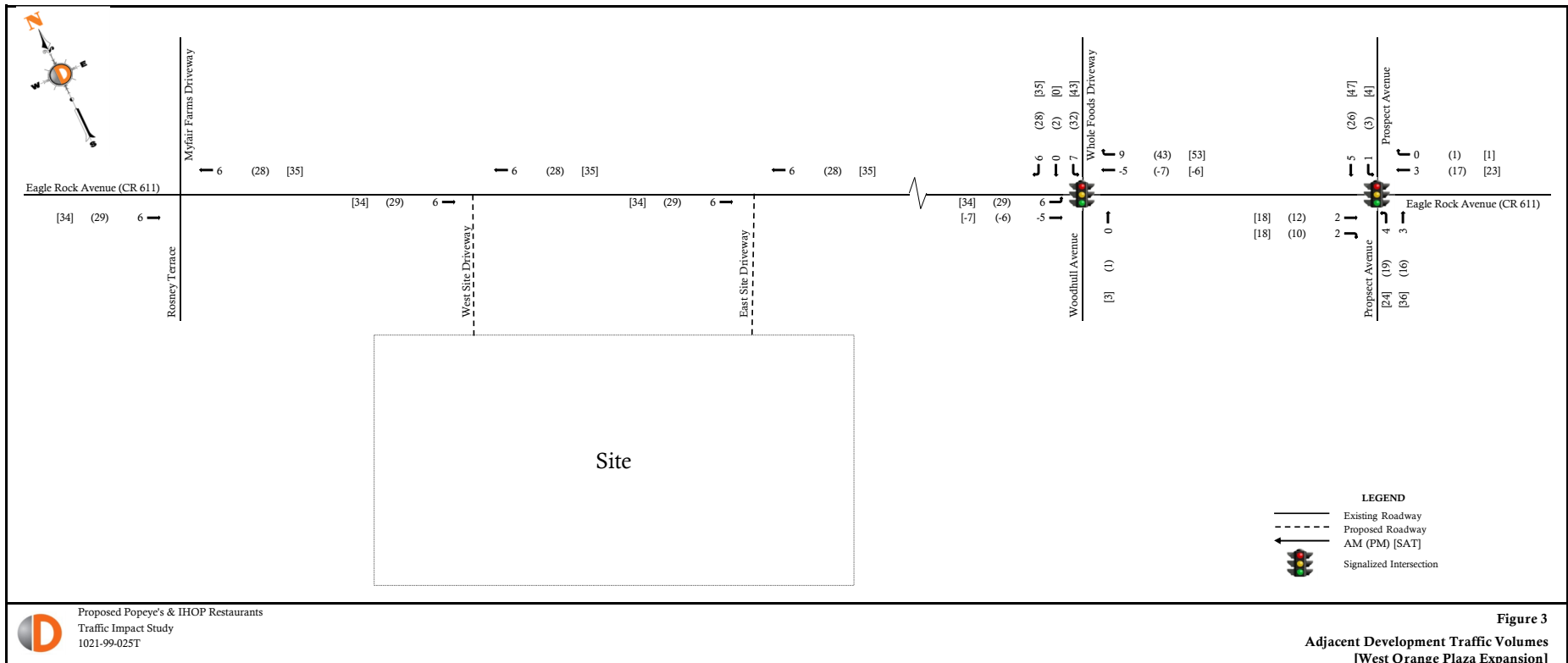
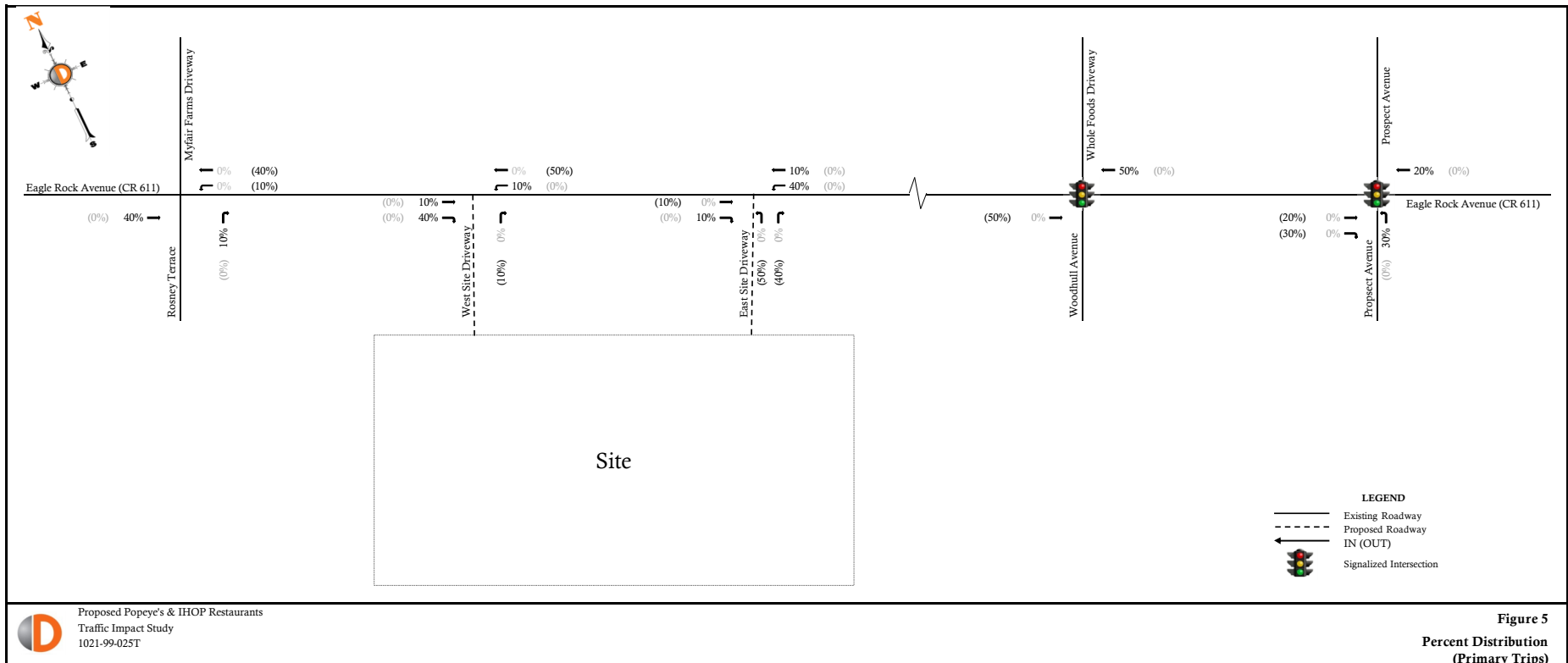
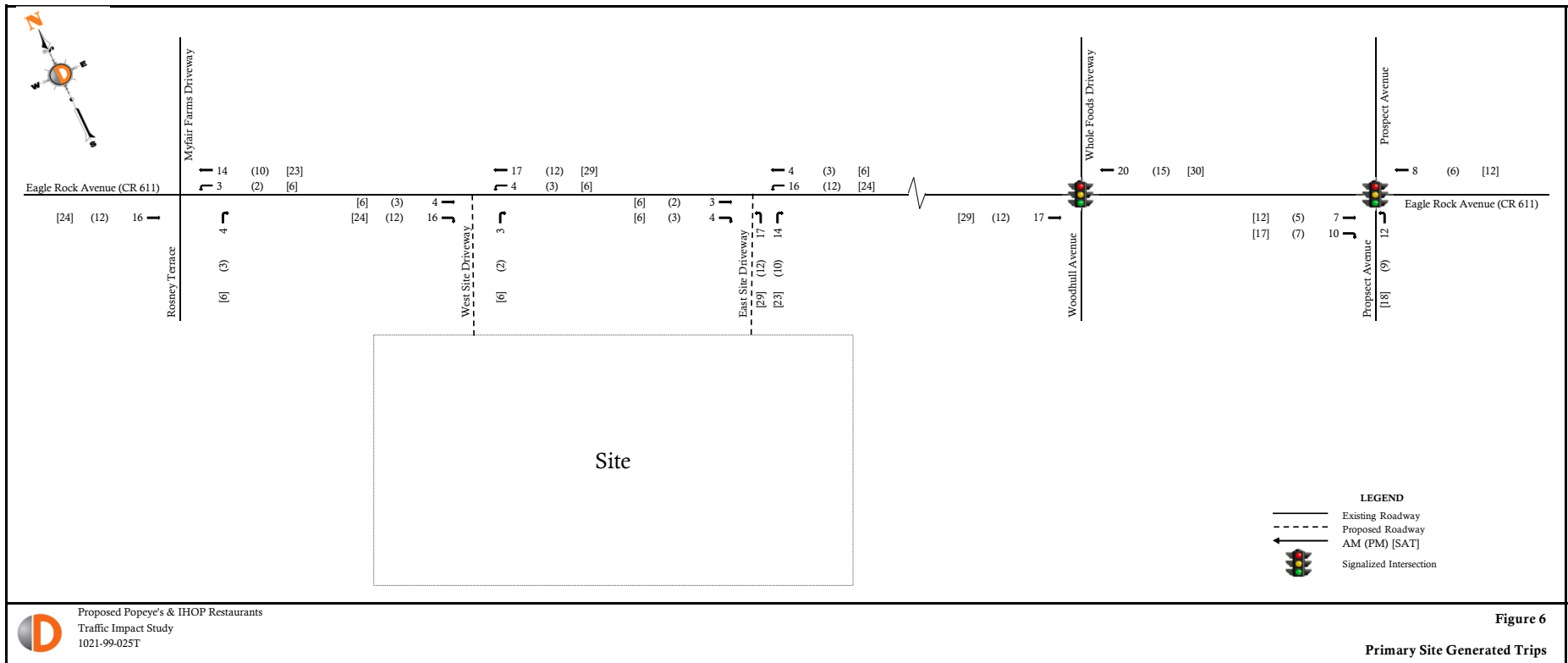
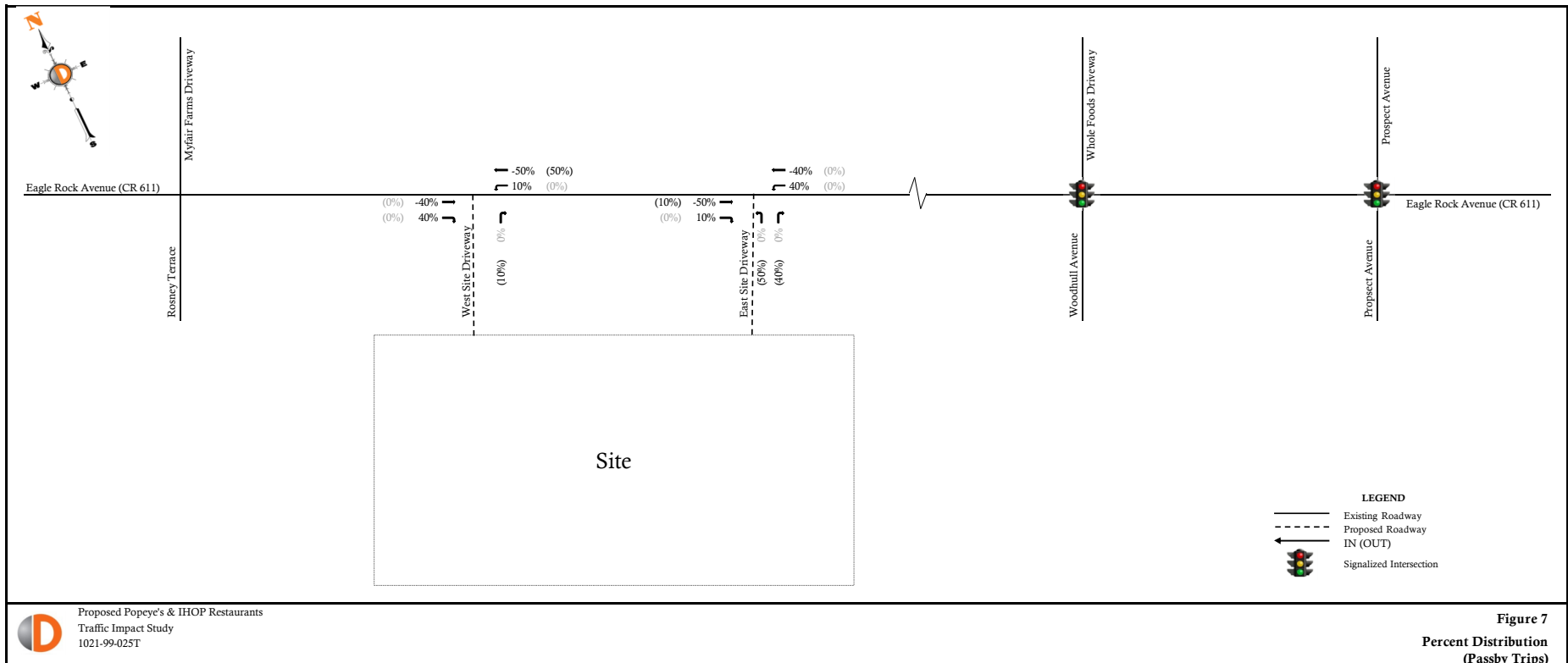


Figure 3
Adjacent Development Traffic Volumes
[West Orange Plaza Expansion]







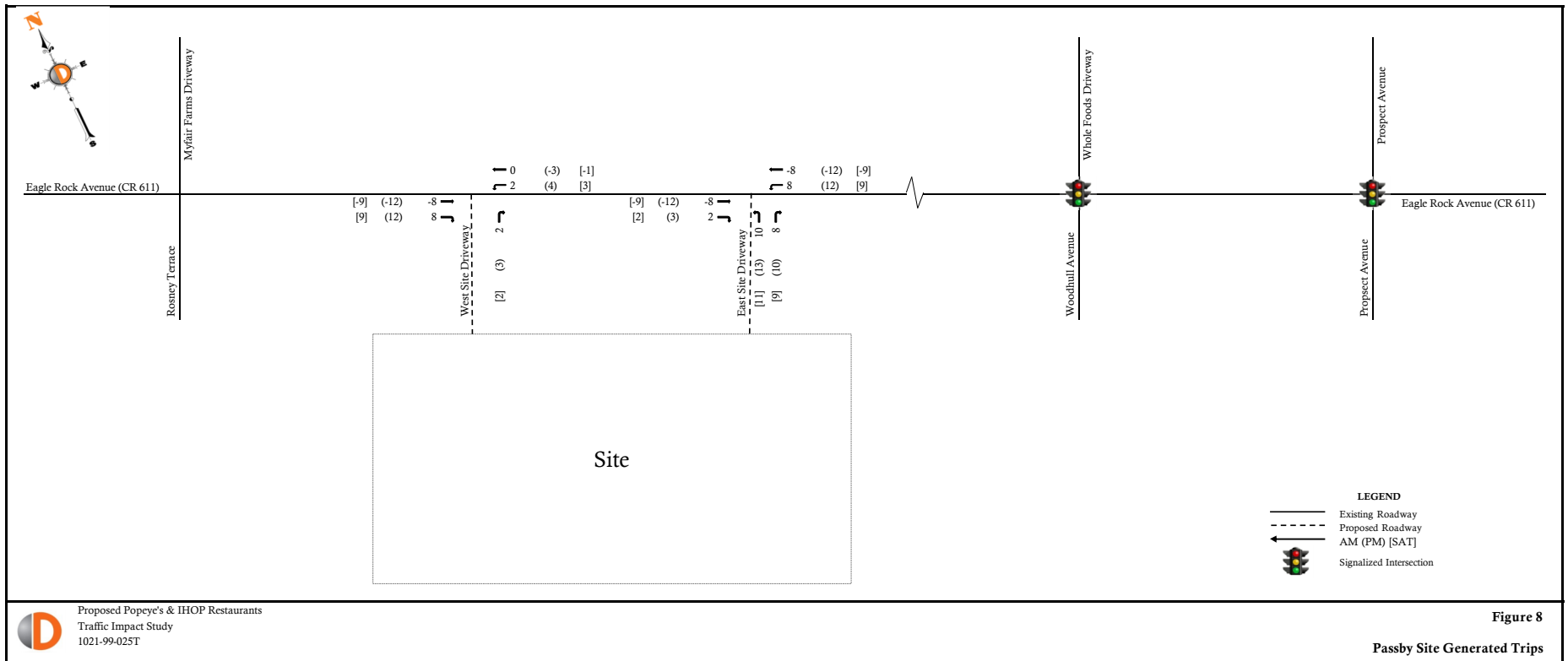


Figure 8
 Passby Site Generated Trips

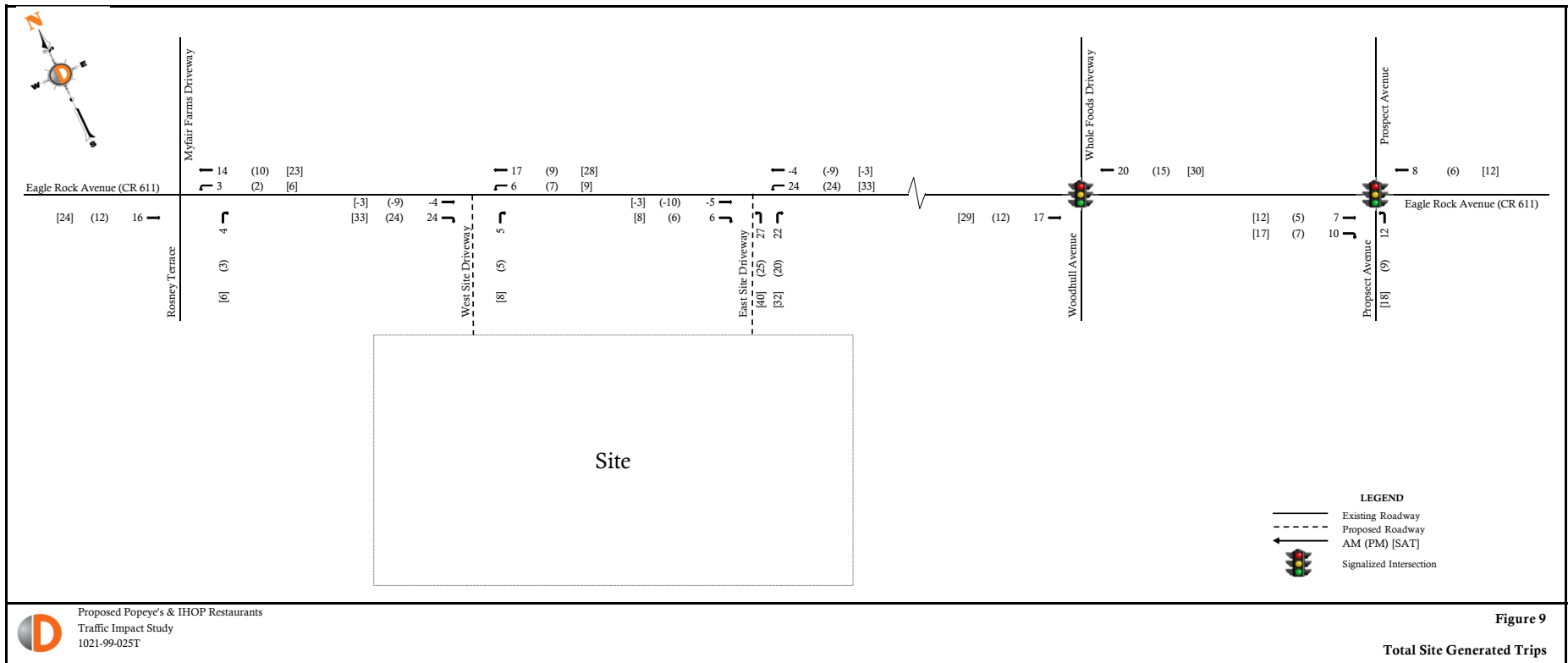
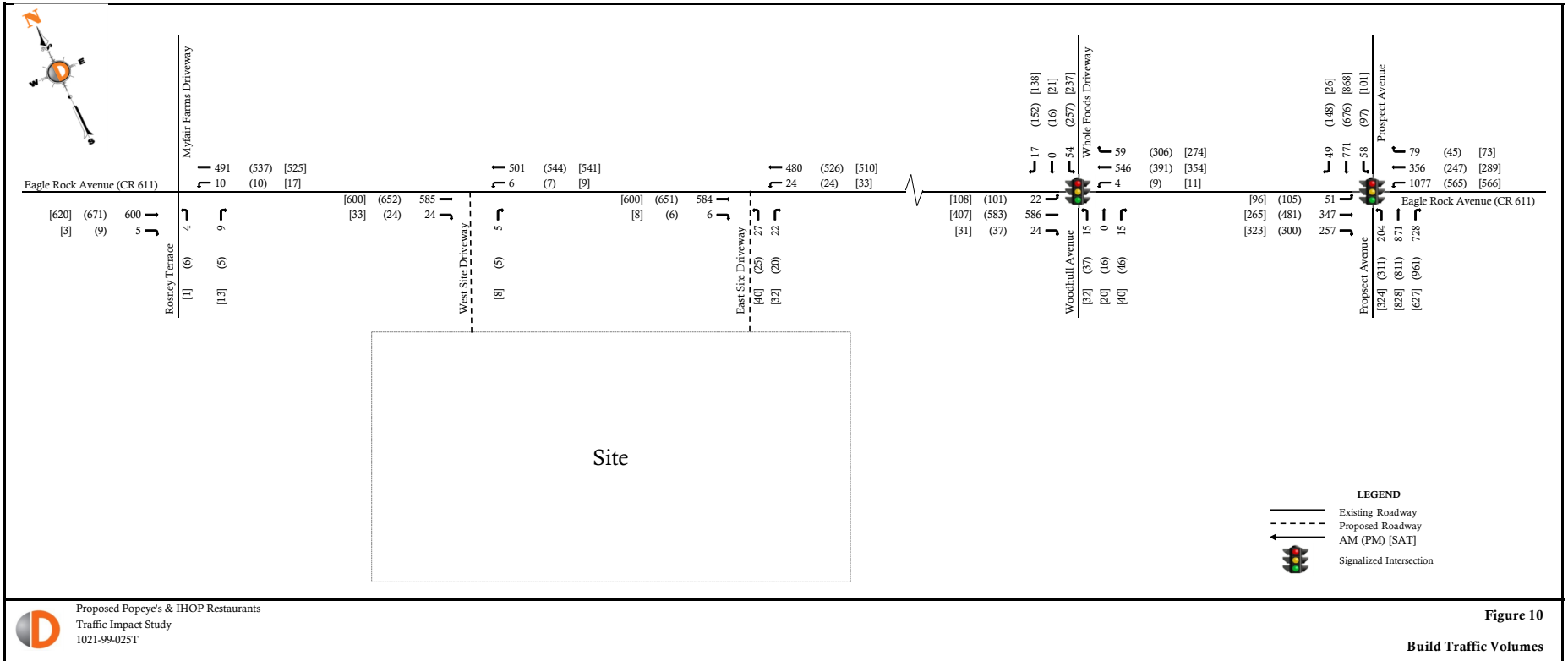


Figure 9
 Total Site Generated Trips



Appendix B

Project Information

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite 110, Chester, NJ 07930
732-681-0760

E/W: Eagle Rock Ave
N/S: Rosney Terrace/Dway
Town/County: West Orange/Essex
Job #: 1021-99-025T

File Name : Eagle Rock Ave & Rosney Terrace-Dway - PM
Site Code : 00000000
Start Date : 5/26/2021
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

[illegible]

	Eagle Rock Avenue (CR 611) Eastbound						Eagle Rock Avenue (CR 611) Westbound						Rosney Terrace Northbound						Mayfield Driveway Southbound					
Start Time	Left	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

[illegible]

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite 110, Chester, NJ 07930
732-681-0760

E/W: Eagle Rock Ave
N/S: Rosney Terrace/Dway
Town/County: West Orange/Essex
Job #: 1021-99-025T

File Name : Eagle Rock Ave & Rosney Terrace-Dway - SAT
Site Code : 00000000
Start Date : 5/22/2021
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

[illegible][illegible]

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732-681-0760

Page No : 1

	Eagle Rock Avenue (CR 611) Eastbound						Eagle Rock Avenue (CR 611) Westbound					Rosney Terrace Northbound					481 Eagle Rock Avenue Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
07:00 AM	0	79	1	0	80	2	91	0	0	93	3	0	0	4	7	0	0	0	0	0	180	
07:15 AM	1	138	2	0	141	1	108	0	0	109	4	0	0	2	6	0	0	0	0	0	256	
07:30 AM	0	165	2	0	167	2	98	0	0	100	1	0	2	2	5	0	0	0	0	0	272	
07:45 AM	0	118	0	0	118	1	93	0	0	94	5	0	6	1	12	0	0	0	0	0	224	
Total	1	500	5	0	506	6	390	0	0	396	13	0	8	9	30	0	0	0	0	0	932	
08:00 AM	0	122	0	0	122	2	96	0	0	98	0	0	1	1	2	0	0	0	0	0	222	
08:15 AM	0	156	2	0	158	2	111	0	0	113	0	0	1	1	2	0	0	0	0	0	273	
08:30 AM	0	120	0	0	120	1	125	0	0	126	1	0	0	4	5	0	0	0	0	0	251	
08:45 AM	0	146	3	0	149	2	111	0	0	113	3	0	3	2	8	0	0	0	0	0	270	
Total	0	544	5	0	549	7	443	0	0	450	4	0	5	8	17	0	0	0	0	0	1016	
*** BREAK ***																						
04:30 PM	0	101	0	0	101	4	96	0	0	100	1	0	0	0	1	0	0	0	0	0	202	
04:45 PM	0	138	3	0	141	0	95	0	0	95	1	0	1	0	2	0	0	0	0	0	238	
Total	0	239	3	0	242	4	191	0	0	195	2	0	1	0	3	0	0	0	0	0	440	
05:00 PM	0	144	1	0	145	4	104	0	0	108	0	0	3	4	7	0	0	0	0	0	260	
05:15 PM	0	160	1	0	161	1	112	0	0	113	1	0	0	0	1	0	0	0	0	0	275	
05:30 PM	0	154	1	0	155	5	124	0	0	129	1	0	1	0	2	0	0	0	0	0	286	
05:45 PM	0	138	4	0	142	0	123	0	0	123	1	0	0	2	3	0	0	0	0	0	268	
Total	0	596	7	0	603	10	463	0	0	473	3	0	4	6	13	0	0	0	0	0	1089	
06:00 PM	0	141	3	0	144	2	110	0	0	112	3	0	1	0	4	0	0	0	1	1	261	
06:15 PM	0	128	1	0	129	2	119	0	0	121	1	0	1	4	6	0	0	0	1	1	257	
Grand Total	1	2148	24	0	2173	31	1716	0	0	1747	26	0	20	27	73	0	0	0	2	2	3995	
Approch %	0	98.8	1.1	0		1.8	98.2	0	0		35.6	0	27.4	37		0	0	0	100			
Total %	0	53.8	0.6	0	54.4	0.8	43	0	0	43.7	0.7	0	0.5	0.7	1.8	0	0	0	0.1	0.1		
Cars	1																					

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732-681-0760

File Name : Eagle Rock Ave & Rooney Terr-Dway - AMPM

Site Code : 00000000

Start Date : 4/16/2024

Page No : 2

Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1

[illegible]

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732-681-0760

File Name : Eagle Rock Ave & Rooney Terr-Dway - SAT
Site Code : 00000000
Start Date : 4/20/2024
Page No : 1

[illegible]

www.dynamictraffic.com
732-681-0760

File Name : Eagle Rock Ave & Rooney Terr-Dway - SAT
Site Code : 00000000
Start Date : 4/20/2024
Page No : 2

[illegible]

Project ID: 25-340178-001

Location: Whole Foods Market Dwy/Woodhull Ave & Eagle Rock Ave/CR 611

City: West Orange

Day: Tuesday

Date: 11/18/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Whole Foods Market Dwy/Woodhull Ave Northbound						Whole Foods Market Dwy/Woodhull Ave Southbound						Eagle Rock Ave/CR 611 Eastbound						Eagle Rock Ave/CR 611 Westbound						Int. Total
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	
7:00 AM	5	0	2	0	0	7	8	0	2	0	0	10	4	104	5	0	0	113	2	103	11	0	0	116	246
7:15 AM	10	0	3	0	0	13	5	0	2	0	2	7	2	164	6	0	1	172	1	118	11	0	0	130	322
7:30 AM	1	0	4	0	1	5	9	0	2	0	1	11	2	155	9	0	0	166	1	97	7	0	0	105	287
7:45 AM	1	0	4	0	0	5	4	0	1	0	0	5	5	116	4	0	1	125	1	119	12	0	1	132	267
Total	17	0	13	0	1	30	26	0	7	0	3	33	13	539	24	0	2	576	5	437	41	0	1	483	1122
8:00 AM	2	0	3	0	1	5	7	0	6	0	0	13	6	117	4	0	1	127	1	131	18	0	1	150	295
8:15 AM	1	1	5	0	0	7	12	0	6	0	1	18	4	116	5	0	0	125	0	116	21	0	0	137	287
8:30 AM	1	1	7	0	0	9	13	0	8	0	1	21	7	111	3	0	0	121	1	114	29	0	0	144	295
8:45 AM	1	1	1	0	0	3	20	0	7	0	0	27	6	114	6	0	0	126	1	101	28	0	0	130	286
Total	5	3	16	0	1	24	52	0	27	0	2	79	23	458	18	0	1	499	3	462	96	0	1	561	1163
BREAK																									
4:00 PM	7	0	9	0	0	16	56	0	23	0	1	79	19	143	7	0	3	169	3	93	57	0	0	153	417
4:15 PM	7	5	13	0	0	25	46	3	22	0	0	71	15	124	8	0	3	147	3	93	50	0	0	146	389
4:30 PM	7	6	11	0	0	24	55	3	22	0	0	80	17	107	7	0	9	131	1	98	69	0	0	168	403
4:45 PM	15	3	9	0	0	27	54	5	37	0	0	96	14	127	6	0	1	147	2	94	65	0	0	161	431
Total	36	14	42	0	0	92	211	11	104	0	1	326	65	501	28	0	16	594	9	378	241	0	0	628	1640
5:00 PM	5	2	13	0	0	20	50	1	22	0	0	73	17	138	6	0	3	161	3	103	66	0	0	172	426
5:15 PM	13	3	11	0	2	27	54	4	20	0	0	78	22	149	14	0	0	185	1	92	57	0	1	150	440
5:30 PM	3	6	11	0	0	20	58	3	40	0	0	101	16	132	10	0	1	158	3	78	65	0	0	146	425
5:45 PM	9	1	8	0	0	18	62	4	20	0	0	86	19	129	6	0	2	154	3	94	71	0	0	168	426
Total	30	12	43	0	2	85	224	12	102	0	0	338	74	548	36	0	6	658	10	367	259	0	1	636	1717
6:00 PM	9	2	8	0	4	19	58	3	28	0	0	89	19	142	3	0	4	164	1	85	67	0	0	153	425
6:15 PM	6	3	8	0	1	17	61	5	25	0	1	91	17	93	11	0	1	121	4	88	69	0	0	161	390
Total	15	5	16	0	5	36	119	8	53	0	1	180	36	235	14	0	5	285	5	173	136	0	0	314	815
Grand Total	103	34	130	0	9	267	632	31	293	0	7	956	211	2281	120	0	30	2612	32	1817	773	0	3	2622	6457
Apprch %	38.6	12.7	48.7	0.0	3.4		66.1	3.2	30.6	0.0	0.7		8.1	87.3	4.6	0.0	1.1		1.2	69.3	29.5	0.0	0.1		
Total %	1.6	0.5	2.0	0.0	0.1	4.1	9.8	0.5	4.5	0.0	0.1	14.8	3.3	35.3	1.9	0.0	0.5	40.5	0.5	28.1	12.0	0.0	0.0	40.6	
Cars, PU, Vans	100	34	129	0		263	623	31	293	0		947	207	2184	120	0		2511	31	1741	765	0		2537	6258
% Cars, PU, Vans	97.1	100.0	99.2	0.0		98.5	98.6	100.0	100.0	0.0		99.1	98.1	95.7	100.0	0.0		96.1	96.9	95.8	99.0	0.0		96.8	96.9
Buses	2	0	0	0		2	3	0	0	0		3	3	65	0	0		68	1	45	0	0		46	119
%Buses	1.9	0.0	0.0	0.0		0.7	0.5	0.0	0.0	0.0		0.3	1.4	2.8	0.0	0.0		2.6	3.1	2.5	0.0	0.0		1.8	1.8
Duals	1	0	1	0		2	6	0	0	0		6	1	27	0	0		28	0	27	7	0		34	70
%Duals	1.0	0.0	0.8	0.0		0.7	0.9	0.0	0.0	0.0		0.6	0.5	1.2	0.0	0.0		1.1	0.0	1.5	0.9	0.0		1.3	1.1
TTST	0	0	0	0		0	0	0	0	0		0	0	5	0	0		5	0	4	1	0		5	10
%TTST	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.2	0.0	0.0		0.2	0.0	0.2	0.1	0.0		0.2	0.2

Project ID: 25-340178-001

Location: Whole Foods Market Dwy/Woodhull Ave & Eagle Ro

City: West Orange

PEAK HOURS

Day: Tuesday

Date: 11/18/2025

AM

	Whole Foods Market Dwy/Woodhull Ave Northbound					Whole Foods Market Dwy/Woodhull Ave Southbound					Eagle Rock Ave/CR 611 Eastbound					Eagle Rock Ave/CR 611 Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	10	0	3	0	13	5	0	2	0	7	2	164	6	0	172	1	118	11	0	130	322
7:30 AM	1	0	4	0	5	9	0	2	0	11	2	155	9	0	166	1	97	7	0	105	287
7:45 AM	1	0	4	0	5	4	0	1	0	5	5	116	4	0	125	1	119	12	0	132	267
8:00 AM	2	0	3	0	5	7	0	6	0	13	6	117	4	0	127	1	131	18	0	150	295
Total Volume	14	0	14	0	28	25	0	11	0	36	15	552	23	0	590	4	465	48	0	517	1171
% App. Total	50.0	0.0	50.0	0.0	100	69.4	0.0	30.6	0.0	100	2.5	93.6	3.9	0.0	100	0.8	89.9	9.3	0.0	100	
PHF	0.538					0.692					0.858					0.862					0.909
Cars, PU, Vans	13	0	14	0	27	20	0	11	0	31	15	518	23	0	556	3	443	45	0	491	1105
% Cars, PU, Vans	92.9	0.0	100.0	0.0	96.4	80.0	0.0	100.0	0.0	86.1	100.0	93.8	100.0	0.0	94.2	75.0	95.3	93.8	0.0	95.0	94.4
Buses	1	0	0	0	1	3	0	0	0	3	0	27	0	0	27	1	15	0	0	16	47
%Buses	7.1	0.0	0.0	0.0	3.6	12.0	0.0	0.0	0.0	8.3	0.0	4.9	0.0	0.0	4.6	25.0	3.2	0.0	0.0	3.1	4.0
Duals	0	0	0	0	0	2	0	0	0	2	0	6	0	0	6	0	5	2	0	7	15
%Duals	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	5.6	0.0	1.1	0.0	0.0	1.0	0.0	1.1	4.2	0.0	1.4	1.3
TTST	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	1	0	3	4
%TTST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.4	2.1	0.0	0.6	0.3

PM

	Whole Foods Market Dwy/Woodhull Ave Northbound					Whole Foods Market Dwy/Woodhull Ave Southbound					Eagle Rock Ave/CR 611 Eastbound					Eagle Rock Ave/CR 611 Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
4:45 PM	15	3	9	0	27	54	5	37	0	96	14	127	6	0	147	2	94	65	0	161	431
5:00 PM	5	2	13	0	20	50	1	22	0	73	17	138	6	0	161	3	103	66	0	172	426
5:15 PM	13	3	11	0	27	54	4	20	0	78	22	149	14	0	185	1	92	57	0	150	440
5:30 PM	3	6	11	0	20	58	3	40	0	101	16	132	10	0	158	3	78	65	0	146	425
Total Volume	36	14	44	0	94	216	13	119	0	348	69	546	36	0	651	9	367	253	0	629	1722
% App. Total	38.3	14.9	46.8	0.0	100	62.1	3.7	34.2	0.0	100	10.6	83.9	5.5	0.0	100	1.4	58.3	40.2	0.0	100	
PHF	0.870					0.861					0.880					0.914					0.978
Cars, PU, Vans	35	14	44	0	93	215	13	119	0	347	69	532	36	0	637	9	363	253	0	625	1702
% Cars, PU, Vans	97.2	100.0	100.0	0.0	98.9	99.5	100.0	100.0	0.0	99.7	100.0	97.4	100.0	0.0	97.8	100.0	98.9	100.0	0.0	99.4	98.8
Buses	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	2	0	0	2	10
%Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	1.2	0.0	0.5	0.0	0.0	0.3	0.6
Duals	1	0	0	0	1	1	0	0	0	1	0	4	0	0	4	0	1	0	0	1	7
%Duals	2.8	0.0	0.0	0.0	1.1	0.5	0.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.6	0.0	0.3	0.0	0.0	0.2	0.4
TTST	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
%TTST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.2	0.2

Project ID: 25-340178-001

Location: Whole Foods Market Dwy/Woodhull Ave & Eagle Rock Ave/CR 611

City: West Orange

Day: Saturday

Date: 11/8/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Whole Foods Market Dwy/Woodhull Ave Northbound						Whole Foods Market Dwy/Woodhull Ave Southbound						Eagle Rock Ave/CR 611 Eastbound						Eagle Rock Ave/CR 611 Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
11:00 AM	9	0	12	0	0	21	28	3	13	0	0	44	9	75	6	0	0	90	3	73	38	0	0	114	269
11:15 AM	8	2	6	0	2	16	30	2	11	0	2	43	15	77	9	0	0	101	2	81	40	0	0	123	283
11:30 AM	4	2	11	0	0	17	36	4	23	0	0	63	19	89	15	0	3	123	3	64	46	0	0	113	316
11:45 AM	7	6	9	0	2	22	30	2	24	0	4	56	14	97	8	0	10	119	2	81	45	0	0	128	325
Total	28	10	38	0	4	76	124	11	71	0	6	206	57	338	38	0	13	433	10	299	169	0	0	478	1193
12:00 PM	6	7	8	0	0	21	29	4	24	0	4	57	15	95	13	0	8	123	0	72	36	0	1	108	309
12:15 PM	13	9	9	0	2	31	43	5	31	0	0	79	20	69	4	0	1	93	6	92	41	0	0	139	342
12:30 PM	8	2	9	0	0	19	43	4	26	0	2	73	22	94	7	0	1	123	4	72	42	0	0	118	333
12:45 PM	6	4	9	0	0	19	35	4	29	0	0	68	19	107	9	0	0	135	3	72	49	0	0	124	346
Total	33	22	35	0	2	90	150	17	110	0	6	277	76	365	33	0	10	474	13	308	168	0	1	489	1330
1:00 PM	10	6	11	0	0	27	56	5	27	0	0	88	16	85	7	0	3	108	3	70	59	0	0	132	355
1:15 PM	7	4	9	0	3	20	52	7	17	0	1	76	14	84	7	0	4	105	1	83	62	0	0	146	347
1:30 PM	11	1	11	0	1	23	35	5	17	0	0	57	18	80	9	0	3	107	1	80	61	0	3	142	329
1:45 PM	7	1	12	0	1	20	46	5	24	0	4	75	20	81	9	0	2	110	2	72	51	0	0	125	330
Total	35	12	43	0	5	90	189	22	85	0	5	296	68	330	32	0	12	430	7	305	233	0	3	545	1361
BREAK																									
Grand Total	96	44	116	0	11	256	463	50	266	0	17	779	201	1033	103	0	35	1337	30	912	570	0	4	1512	3884
Approch %	37.5	17.2	45.3	0.0	4.3		59.4	6.4	34.1	0.0	2.2		15.0	77.3	7.7	0.0	2.6		2.0	60.3	37.7	0.0	0.3		
Total %	2.5	1.1	3.0	0.0	0.3	6.6	11.9	1.3	6.8	0.0	0.4	20.1	5.2	26.6	2.7	0.0	0.9	34.4	0.8	23.5	14.7	0.0	0.1	38.9	
Cars, PU, Vans	95	44	116	0		255	460	49	265	0		774	199	1022	103	0		1324	30	898	567	0		1495	3848
% Cars, PU, Vans	99.0	100.0	100.0	0.0		99.6	99.4	98.0	99.6	0.0		99.4	99.0	98.9	100.0	0.0		99.0	100.0	98.5	99.5	0.0		98.9	99.1
Buses	0	0	0	0		0	1	0	0	0		1	0	6	0	0		6	0	5	0	0		5	12
%Buses	0.0	0.0	0.0	0.0		0.0	0.2	0.0	0.0	0.0		0.1	0.0	0.6	0.0	0.0		0.4	0.0	0.5	0.0	0.0		0.3	0.3
Duals	1	0	0	0		1	2	1	1	0		4	2	4	0	0		6	0	9	3	0		12	23
%Duals	1.0	0.0	0.0	0.0		0.4	0.4	2.0	0.4	0.0		0.5	1.0	0.4	0.0	0.0		0.4	0.0	1.0	0.5	0.0		0.8	0.6
TTST	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	1
%TTST	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.1	0.0	0.0		0.1	0.0	0.0	0.0	0.0		0.0	0.0

PEAK HOURS

Day: Saturday
Date: 11/8/2025

PEAK HOURS

[illegible]

Project ID: 25-340178-002

Location: Prospect Ave/CR 577 & Eagle Rock Ave/CR 611

City: West Orange

Day: Tuesday

Date: 11/18/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Prospect Ave/CR 577 Northbound						Prospect Ave/CR 577 Southbound						Eagle Rock Ave/CR 611 Eastbound						Eagle Rock Ave/CR 611 Westbound							
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total	
7:00 AM	37	182	91	0	0	310	5	174	7	0	1	186	11	48	58	0	0	117	150	74	12	0	0	236	849	
7:15 AM	40	246	138	0	0	424	10	227	8	0	1	245	10	72	74	0	0	156	165	79	12	0	0	256	1081	
7:30 AM	32	211	174	0	0	417	7	181	8	0	0	196	14	92	78	0	0	184	225	68	9	0	1	302	1099	
7:45 AM	44	214	199	0	0	457	12	204	9	0	0	225	8	71	44	0	0	123	242	84	14	0	0	340	1145	
Total	153	853	602	0	0	1608	34	786	32	0	2	852	43	283	254	0	0	580	782	305	47	0	1	1134	4174	
8:00 AM	44	207	177	0	0	428	10	176	8	0	1	194	13	55	53	0	0	121	299	97	16	0	1	412	1155	
8:15 AM	53	215	168	0	0	436	12	173	14	0	1	199	13	73	54	0	0	140	244	70	17	0	1	331	1106	
8:30 AM	40	198	156	0	0	394	21	183	16	0	2	220	12	56	57	0	0	125	250	81	29	0	0	360	1099	
8:45 AM	50	191	161	0	0	402	18	162	12	0	0	192	18	64	59	0	0	141	210	69	19	0	0	298	1033	
Total	187	811	662	0	0	1660	61	694	50	0	4	805	56	248	223	0	0	527	1003	317	81	0	2	1401	4393	
BREAK																										
4:00 PM	65	187	178	0	0	430	17	157	27	0	0	201	28	87	86	0	0	201	152	67	15	0	0	234	1066	
4:15 PM	64	199	172	0	0	435	20	164	34	0	0	218	34	81	75	0	0	190	145	50	7	0	0	202	1045	
4:30 PM	70	230	209	0	0	509	11	138	36	0	0	185	22	77	69	0	0	168	154	54	13	0	0	221	1083	
4:45 PM	74	194	220	0	0	488	14	132	30	0	0	176	15	97	84	0	0	196	136	64	12	0	0	212	1072	
Total	273	810	779	0	0	1862	62	591	127	0	0	780	99	342	314	0	0	755	587	235	47	0	0	869	4266	
5:00 PM	68	190	220	0	2	478	16	147	52	0	0	215	25	95	68	0	0	188	134	55	12	0	0	201	1082	
5:15 PM	72	204	228	0	0	504	28	159	26	0	0	213	24	110	62	0	0	196	143	49	9	0	0	201	1114	
5:30 PM	68	197	236	0	0	501	28	160	26	0	1	214	26	124	69	0	0	219	145	45	11	0	0	201	1135	
5:45 PM	64	173	240	0	0	477	18	159	38	0	1	215	25	115	72	0	0	212	121	66	10	0	0	197	1101	
Total	272	764	924	0	2	1960	90	625	142	0	2	857	100	444	271	0	0	815	543	215	42	0	0	800	4432	
6:00 PM	69	164	179	0	2	412	16	143	35	0	0	194	29	95	83	0	0	207	117	50	12	0	0	179	992	
6:15 PM	71	209	227	0	0	507	14	127	33	0	1	174	20	78	60	0	0	158	118	56	9	0	1	183	1022	
Total	140	373	406	0	2	919	30	270	68	0	1	368	49	173	143	0	0	365	235	106	21	0	1	362	2014	
Grand Total	1025	3611	3373	0	4	8009	277	2966	419	0	9	3662	347	1490	1205	0	0	3042	3150	1178	238	0	4	4566	19279	
Apprch %	12.8	45.1	42.1	0.0	0.0		7.6	81.0	11.4	0.0	0.2		11.4	49.0	39.6	0.0	0.0		69.0	25.8	5.2	0.0	0.1			
Total %	5.3	18.7	17.5	0.0	0.0	41.5	1.4	15.4	2.2	0.0	0.0	19.0	1.8	7.7	6.3	0.0	0.0	15.8	16.3	6.1	1.2	0.0	0.0	23.7		
Cars, PU, Vans	988	3492	3336	0		7816	269	2887	414	0		3570	338	1421	1174	0		2933	3108	1135	221	0		4464	18783	
% Cars, PU, Vans	96.4	96.7	98.9	0.0		97.6	97.1	97.3	98.8	0.0		97.5	97.4	95.4	97.4	0.0		96.4	98.7	96.3	92.9	0.0		97.8	97.4	
Buses	21	14	9	0		44	5	10	1	0		16	0	46	23	0		69	11	23	4	0		38	167	
%Buses	2.0	0.4	0.3	0.0		0.5	1.8	0.3	0.2	0.0		0.4	0.0	3.1	1.9	0.0		2.3	0.3	2.0	1.7	0.0		0.8	0.9	
Duals	16	78	25	0		119	3	51	3	0		57	7	19	8	0		34	28	16	11	0		55	265	
%Duals	1.6	2.2	0.7	0.0		1.5	1.1	1.7	0.7	0.0		1.6	2.0	1.3	0.7	0.0		1.1	0.9	1.4	4.6	0.0		1.2	1.4	
TTST	0	27	3	0		30	0	18	1	0		19	2	4	0	0		6	3	4	2	0		9	64	
%TTST	0.0	0.7	0.1	0.0		0.4	0.0	0.6	0.2	0.0		0.5	0.6	0.3	0.0	0.0		0.2	0.1	0.3	0.8	0.0		0.2	0.3	

Project ID: 25-340178-002

Location: Prospect Ave/CR 577 & Eagle Rock Ave/CR 611

City: West Orange

PEAK HOURS

Day: Tuesday

Date: 11/18/2025

AM

	Prospect Ave/CR 577 Northbound					Prospect Ave/CR 577 Southbound					Eagle Rock Ave/CR 611 Eastbound					Eagle Rock Ave/CR 611 Westbound					
Start Time	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
7:45 AM	44	214	199	0	457	12	204	9	0	225	8	71	44	0	123	242	84	14	0	340	1145
8:00 AM	44	207	177	0	428	10	176	8	0	194	13	55	53	0	121	299	97	16	0	412	1155
8:15 AM	53	215	168	0	436	12	173	14	0	199	13	73	54	0	140	244	70	17	0	331	1106
8:30 AM	40	198	156	0	394	21	183	16	0	220	12	56	57	0	125	250	81	29	0	360	1099
Total Volume	181	834	700	0	1715	55	736	47	0	838	46	255	208	0	509	1035	332	76	0	1443	4505
% App. Total	10.6	48.6	40.8	0.0	100	6.6	87.8	5.6	0.0	100	9.0	50.1	40.9	0.0	100	71.7	23.0	5.3	0.0	100	
PHF	0.938					0.931					0.909					0.876					0.975
Cars, PU, Vans	170	781	675	0	1626	51	712	45	0	808	42	237	201	0	480	1018	315	65	0	1398	4312
% Cars, PU, Vans	93.9	93.6	96.4	0.0	94.8	92.7	96.7	95.7	0.0	96.4	91.3	92.9	96.6	0.0	94.3	98.4	94.9	85.5	0.0	96.9	95.7
Buses	7	5	6	0	18	4	2	1	0	7	0	14	6	0	20	7	11	2	0	20	65
%Buses	3.9	0.6	0.9	0.0	1.0	7.3	0.3	2.1	0.0	0.8	0.0	5.5	2.9	0.0	3.9	0.7	3.3	2.6	0.0	1.4	1.4
Duals	4	40	16	0	60	0	16	1	0	17	4	4	1	0	9	10	5	7	0	22	108
%Duals	2.2	4.8	2.3	0.0	3.5	0.0	2.2	2.1	0.0	2.0	8.7	1.6	0.5	0.0	1.8	1.0	1.5	9.2	0.0	1.5	2.4
TTST	0	8	3	0	11	0	6	0	0	6	0	0	0	0	0	0	1	2	0	3	20
%TTST	0.0	1.0	0.4	0.0	0.6	0.0	0.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.6	0.0	0.2	0.4

PM

	Prospect Ave/CR 577 Northbound					Prospect Ave/CR 577 Southbound					Eagle Rock Ave/CR 611 Eastbound					Eagle Rock Ave/CR 611 Westbound					
Start Time	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:30 PM																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
5:00 PM	68	190	220	0	478	16	147	52	0	215	25	95	68	0	188	134	55	12	0	201	1082
5:15 PM	72	204	228	0	504	28	159	26	0	213	24	110	62	0	196	143	49	9	0	201	1114
5:30 PM	68	197	236	0	501	28	160	26	0	214	26	124	69	0	219	145	45	11	0	201	1135
5:45 PM	64	173	240	0	477	18	159	38	0	215	25	115	72	0	212	121	66	10	0	197	1101
Total Volume	272	764	924	0	1960	90	625	142	0	857	100	444	271	0	815	543	215	42	0	800	4432
% App. Total	13.9	39.0	47.1	0.0	100	10.5	72.9	16.6	0.0	100	12.3	54.5	33.3	0.0	100	67.9	26.9	5.3	0.0	100	
PHF	0.972					0.997					0.930					0.995					0.976
Cars, PU, Vans	270	756	918	0	1944	89	612	141	0	842	99	434	264	0	797	535	212	41	0	788	4371
% Cars, PU, Vans	99.3	99.0	99.4	0.0	99.2	98.9	97.9	99.3	0.0	98.2	99.0	97.7	97.4	0.0	97.8	98.5	98.6	97.6	0.0	98.5	98.6
Buses	1	1	0	0	2	0	0	0	0	0	0	5	2	0	7	0	1	0	0	1	10
%Buses	0.4	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.7	0.0	0.9	0.0	0.5	0.0	0.0	0.1	0.2
Duals	1	4	6	0	11	1	9	1	0	11	0	4	5	0	9	7	2	1	0	10	41
%Duals	0.4	0.5	0.6	0.0	0.6	1.1	1.4	0.7	0.0	1.3	0.0	0.9	1.8	0.0	1.1	1.3	0.9	2.4	0.0	1.3	0.9
TTST	0	3	0	0	3	0	4	0	0	4	1	1	0	0	2	1	0	0	0	1	10
%TTST	0.0	0.4	0.0	0.0	0.2	0.0	0.6	0.0	0.0	0.5	1.0	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.1	0.2

Project ID: 25-340178-002

Location: Prospect Ave/CR 577 & Eagle Rock Ave/CR 611

City: West Orange

Day: Saturday

Date: 11/8/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

Start Time	Prospect Ave/CR 577 Northbound						Prospect Ave/CR 577 Southbound						Eagle Rock Ave/CR 611 Eastbound						Eagle Rock Ave/CR 611 Westbound						Int. Total
	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	
11:00 AM	57	152	166	0	0	375	25	202	8	0	0	235	22	47	42	0	0	111	128	51	16	0	0	195	916
11:15 AM	63	163	130	0	0	356	20	163	8	0	2	191	13	46	58	0	0	117	125	45	20	0	2	190	854
11:30 AM	62	186	159	0	0	407	18	192	6	0	0	216	20	51	60	0	0	131	140	39	14	0	0	193	947
11:45 AM	61	216	162	0	0	439	21	173	14	0	1	208	15	53	70	0	0	138	149	50	24	0	0	223	1008
Total	243	717	617	0	0	1577	84	730	36	0	3	850	70	197	230	0	0	497	542	185	74	0	2	801	3725
12:00 PM	54	184	161	0	0	399	19	182	5	0	8	206	15	54	61	0	0	130	135	55	21	0	0	211	946
12:15 PM	72	171	132	0	0	375	17	156	9	0	2	182	15	49	62	0	0	126	154	57	17	0	2	228	911
12:30 PM	68	165	154	0	0	387	18	166	8	0	1	192	21	51	74	0	0	146	157	50	17	0	0	224	949
12:45 PM	67	184	168	0	0	419	32	190	3	0	1	225	20	55	74	0	0	149	143	57	21	0	0	221	1014
Total	261	704	615	0	0	1580	86	694	25	0	12	805	71	209	271	0	0	551	589	219	76	0	2	884	3820
1:00 PM	61	180	142	0	0	383	27	221	9	0	1	257	31	58	62	0	0	151	138	60	8	0	0	206	997
1:15 PM	63	194	149	0	0	406	17	178	8	0	1	203	25	62	60	0	0	147	136	71	22	0	0	229	985
1:30 PM	80	203	144	0	0	427	17	200	5	0	0	222	16	39	71	0	1	126	127	56	18	0	0	201	976
1:45 PM	60	188	150	0	0	398	20	208	9	0	4	237	29	36	68	0	3	133	138	60	31	0	10	229	997
Total	264	765	585	0	0	1614	81	807	31	0	6	919	101	195	261	0	4	557	539	247	79	0	10	865	3955
BREAK																									
Grand Total	768	2186	1817	0	0	4771	251	2231	92	0	21	2574	242	601	762	0	4	1605	1670	651	229	0	14	2550	11500
Approch %	16.1	45.8	38.1	0.0	0.0		9.8	86.7	3.6	0.0	0.8		15.1	37.4	47.5	0.0	0.2		65.5	25.5	9.0	0.0	0.5		
Total %	6.7	19.0	15.8	0.0	0.0	41.5	2.2	19.4	0.8	0.0	0.2	22.4	2.1	5.2	6.6	0.0	0.0	14.0	14.5	5.7	2.0	0.0	0.1	22.2	
Cars, PU, Vans	753	2163	1803	0		4719	251	2202	91	0		2544	241	597	754	0		1592	1655	650	229	0		2534	11389
% Cars, PU, Vans	98.0	98.9	99.2	0.0		98.9	100.0	98.7	98.9	0.0		98.8	99.6	99.3	99.0	0.0		99.2	99.1	99.8	100.0	0.0		99.4	99.0
Buses	5	1	2	0		8	0	1	0	0		1	1	0	6	0		7	1	0	0	0		1	17
%Buses	0.7	0.0	0.1	0.0		0.2	0.0	0.0	0.0	0.0		0.0	0.4	0.0	0.8	0.0		0.4	0.1	0.0	0.0	0.0		0.0	0.1
Duals	10	19	12	0		41	0	21	1	0		22	0	3	2	0		5	12	1	0	0		13	81
%Duals	1.3	0.9	0.7	0.0		0.9	0.0	0.9	1.1	0.0		0.9	0.0	0.5	0.3	0.0		0.3	0.7	0.2	0.0	0.0		0.5	0.7
TTST	0	3	0	0		3	0	7	0	0		7	0	1	0	0		1	2	0	0	0		2	13
%TTST	0.0	0.1	0.0	0.0		0.1	0.0	0.3	0.0	0.0		0.3	0.0	0.2	0.0	0.0		0.1	0.1	0.0	0.0	0.0		0.1	0.1

Project ID: 25-340178-002

Location: Prospect Ave/CR 577 & Eagle Rock Ave/CR 611

City: West Orange

PEAK HOURS

Day: Saturday

Date: 11/8/2025

NOON

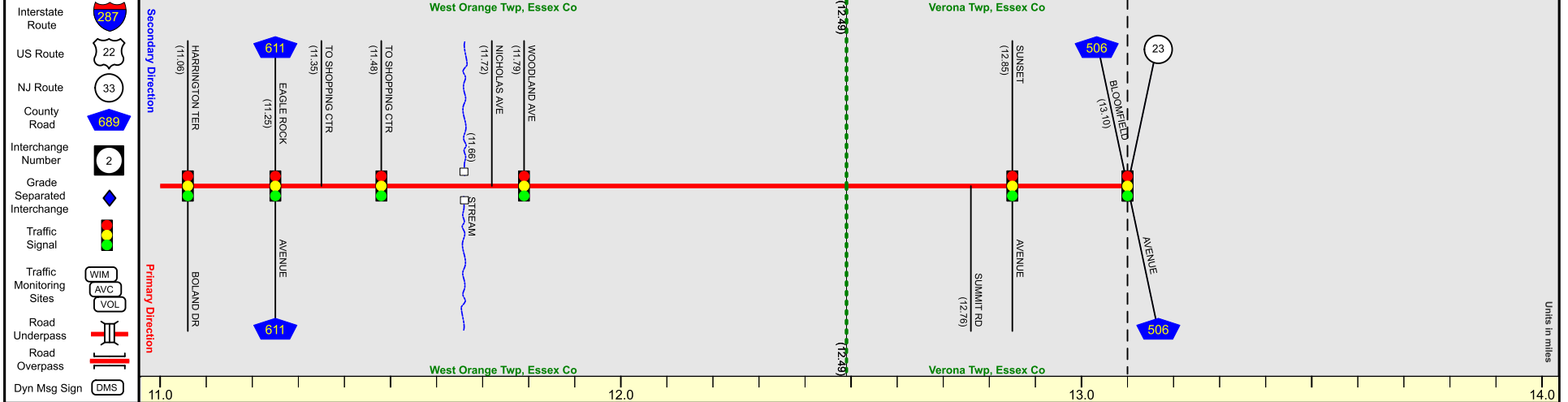
	Prospect Ave/CR 577 Northbound					Prospect Ave/CR 577 Southbound					Eagle Rock Ave/CR 611 Eastbound					Eagle Rock Ave/CR 611 Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 11:00 AM - 02:00 PM																					
Peak Hour for Entire Intersection Begins at 12:45 PM																					
12:45 PM	67	184	168	0	419	32	190	3	0	225	20	55	74	0	149	143	57	21	0	221	1014
1:00 PM	61	180	142	0	383	27	221	9	0	257	31	58	62	0	151	138	60	8	0	206	997
1:15 PM	63	194	149	0	406	17	178	8	0	203	25	62	60	0	147	136	71	22	0	229	985
1:30 PM	80	203	144	0	427	17	200	5	0	222	16	39	71	0	126	127	56	18	0	201	976
Total Volume	271	761	603	0	1635	93	789	25	0	907	92	214	267	0	573	544	244	69	0	857	3972
% App. Total	16.6	46.5	36.9	0.0	100	10.3	87.0	2.8	0.0	100	16.1	37.3	46.6	0.0	100	63.5	28.5	8.1	0.0	100	
PHF	0.957					0.882					0.949					0.936					0.979
Cars, PU, Vans	267	752	600	0	1619	93	775	25	0	893	92	214	265	0	571	542	244	69	0	855	3938
% Cars, PU, Vans	98.5	98.8	99.5	0.0	99.0	100.0	98.2	100.0	0.0	98.5	100.0	100.0	99.3	0.0	99.7	99.6	100.0	100.0	0.0	99.8	99.1
Buses	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
%Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Duals	4	8	3	0	15	0	12	0	0	12	0	0	1	0	1	1	0	0	0	1	29
%Duals	1.5	1.1	0.5	0.0	0.9	0.0	1.5	0.0	0.0	1.3	0.0	0.0	0.4	0.0	0.2	0.2	0.0	0.0	0.0	0.1	0.7
TTST	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
%TTST	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.1

ROUTE 577 (South to North)

Mile Posts: 11.000 - 13.100



Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



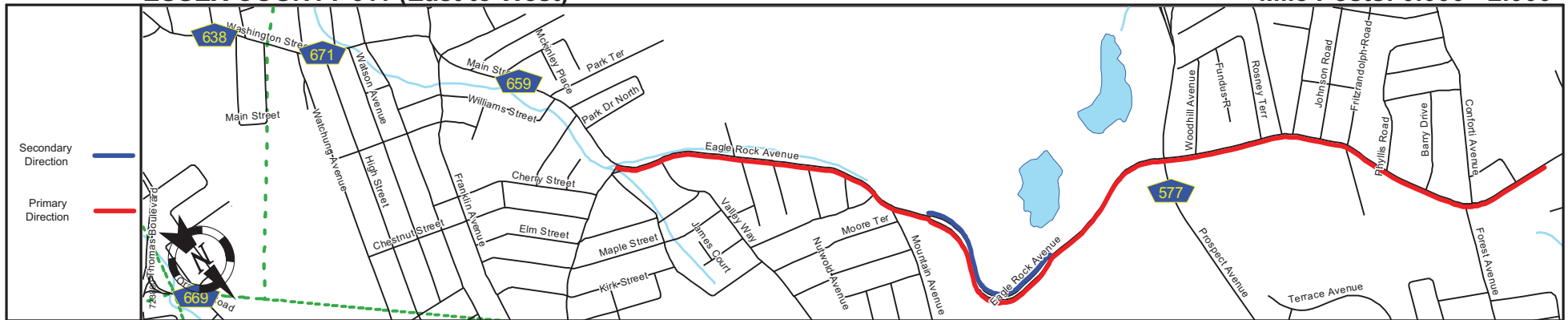
Street Name	Prospect Avenue										Mt Prospect Avenue	End Rt. 577 MP= 3.10
Jurisdiction	County											
Functional Class	Urban Principal Arterial											
Federal Aid - NHS Sy	NHS											
Control Section												
Speed Limit	40										35	
Number of Lanes	5	4	2	3	2							
Med. Type	None											
Med. Width												
Pavement	60	40	24	34	24	30	34					
Shoulder			2	4								
Traffic Volume												
Traffic Sta. ID												
Structure No.												
Enlarged Views												

SRI = 00000577__

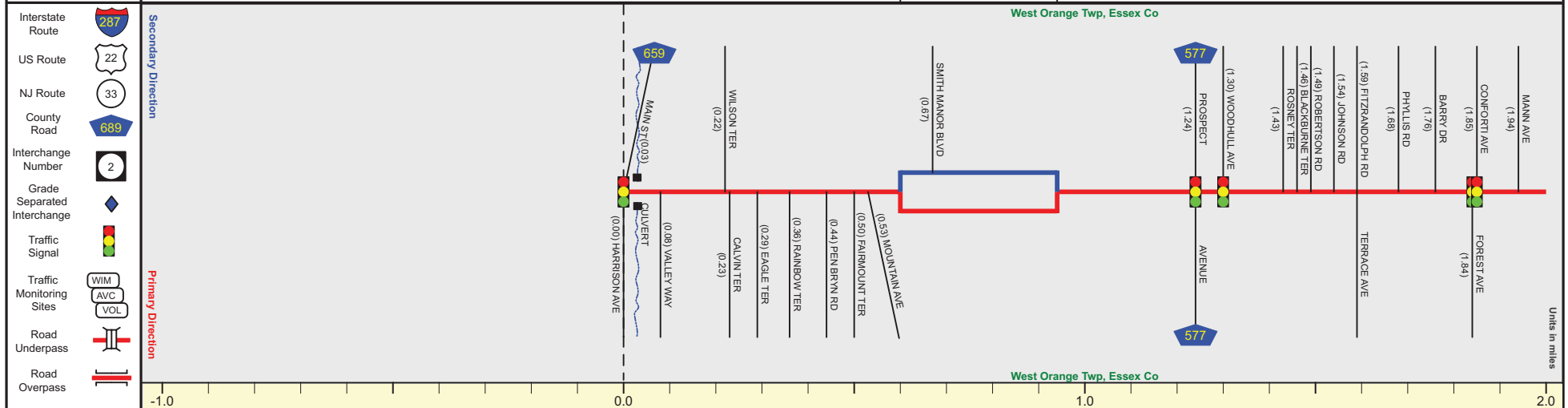
Date last inventoried: June 2012

ESSEX COUNTY 611 (East to West)

Mile Posts: 0.000 - 2.000



Pavement	20
Shoulder	0
Number of Lanes	2
Speed Limit	35
Street Name	Eagle Rock Avenue



Street Name	Eagle Rock Avenue
Jurisdiction	County
Functional Class	Urban Minor Arterial
Federal Aid - NHS Sy	STP
Control Section	Begin Essex County 611 MP=0.00
Speed Limit	25 40 35 30
Number of Lanes	4 2 3
Med. Type	None Curbed Positive None
Med. Width	0 2 0
Pavement	40 20 40
Shoulder	0
Traffic Volume	
Traffic Sta. ID	
Structure No.	
Enlarged Views	

SRI = 07000611__

Date last inventoried: April 2011

rev. Jul. 8, 2010

EAGLE ROCK AVENUE (C.R. 611) AND WOODHULL AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY

TIMING SCHEDULE SEMI ACTUATED										
VEHICULAR ACTUATION PHASE	SIGNAL INDICATIONS							TIME (SECONDS)		
	Eagle Rock EB Left	Eagle Rock EB	Eagle Rock WB	Driveway SB	Woodhull NB	Woodhull Peds	Eagle Rock Peds	I 70 sec.	II free	III 65 sec.
A. EAGLE ROCK AVENUE (CR 611) EASTBOUND LEFT CHANGE CLEARANCE	<G <Y <R	G G G	R R R	R R R	R R R	DW DW DW	DW DW DW	5 3 1	5 3 1	5 3 1
B. EAGLE ROCK AVENUE (CR 611) R.O.W. PEDESTRIAN CLEARANCE CHANGE CLEARANCE	<R <R <R <R	G G Y R	G G Y R	R R R R	R R R R	DW DW DW DW	W FDW DW DW	16-10 16 4 2	5 16 4 2	11-5 16 4 2
C. SHOPPING CENTER SOUTHBOUND CHANGE CLEARANCE	<R <R <R	R R R	R R R	G Y R	R R R	DW DW DW	DW DW DW	7-12 3 2	7-12 3 2	7-12 3 2
D. WOODHULL AVENUE NORTHBOUND CHANGE CLEARANCE	<R <R <R	R R R	R R R	R R R	G Y R	DW DW DW	DW DW DW	7 3 2	7 3 2	7 3 2
EMERGENCY FLASH	<R	Y	Y	R	R	DARK	DARK			

rev. Jul. 8, 2010

**EAGLE ROCK AVENUE (C.R. 611) AND WOODHULL AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY**

PEDESTRIAN ACTUATION	SIGNAL INDICATIONS							TIME (SECONDS)		
	Eagle Rock EB Left	Eagle Rock EB	Eagle Rock WB	Driveway SB	Woodhull NB	Woodhull Peds	Eagle Rock Peds	I 70 sec.	II free	III 65 sec.
A. EAGLE ROCK AVENUE (CR 611) EASTBOUND LEFT CHANGE CLEARANCE	<G <Y <R	G G G	R R R	R R R	R R R	DW DW DW	DW DW DW	5 3 1	5 3 1	5 3 1
B. EAGLE ROCK AVENUE (CR 611) R.O.W. PEDESTRIAN CLEARANCE CHANGE CLEARANCE	<R <R <R <R	G G Y R	G G Y R	R R R R	R R R R	DW DW DW DW	W FDW DW DW	16-10 16 4 2	5 16 4 2	11-5 16 4 2
C. SHOPPING CENTER SOUTHBOUND CHANGE CLEARANCE	<R <R <R	R R R	R R R	G Y R	R R R	DW DW DW	DW DW DW	7-12 3 2	7-12 3 2	7-12 3 2
D. WOODHULL AVENUE NORTHBOUND PEDESTRIAN CLEARANCE CHANGE CLEARANCE	<R <R <R <R	R R R R	R R R R	R R R R	G G Y R	W FDW DW DW	DW DW DW DW	5 16 3 2	5 16 3 2	5 16 3 2

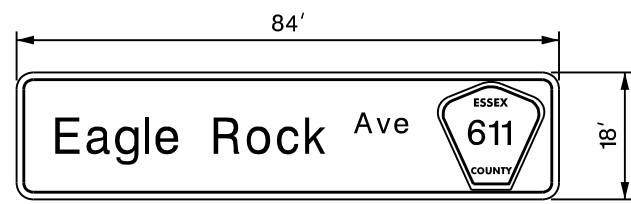
EAGLE ROCK AVENUE (C.R. 611) AND WOODHULL AVENUE
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY

NOTES:

1. The Vehicle Memory and Recall are to be off for Phases A, C, and D.
2. Vehicle extension shall be set at 2 seconds for Phases A, C, and D.
3. The manual controller is to be disconnected.
4. In the event of a pedestrian activation on Phase D during timing plans I or III, coordination shall be broken, and shall resume coordination by holding Phase B during the next cycle.
5. The hours of operation are as follows:
 - Timing Plan I - 6:30 a.m. - 9:30 a.m., Monday-Friday
 - Timing Plan II - 10:00 p.m. - 6:30 a.m., Monday-Friday, 10:00 p.m.-9:00 a.m. Saturday-Sunday
 - Timing Plan III - all other times
6. An offset is to be measured from the beginning of green for westbound Eagle Rock Avenue (Phase B) and the beginning of green to Prospect Avenue (Phase B) at the intersection of Prospect Avenue and Eagle Rock Avenue during timing Plans I and III. The offsets are as follows:
 - Timing Plan I - 62 seconds
 - Timing Plan II - no offset
 - Timing Plan III - 52 seconds
7. The intersection shall operate in free float mode (i.e. no background cycle) during Timing Plan II.

PAY ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
29	TRAFFIC SIGNAL HEADS	14 UNITS
30	PEDESTRIAN SIGNAL HEADS	6 UNITS
38	IMAGE DETECTOR CABLE	462 L.F.
39	IMAGE DETECTOR UNIT	3 UNITS
40	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	387 L.F.
41	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	1276 L.F.
42	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	950 L.F.
45	GROUND WIRE, NO. 8 AWG	395 L.F.
47	CONTROLLER, 12 PHASE	1 UNIT
48	BATTERY BACKUP W/ 18" SKIRT	1 UNIT
49	TRAFFIC CONTROLLER ASSEMBLY TURN-ON	1 UNIT
51	PUSH BUTTON ASSEMBLIES WITH R10-3e SIGN	2 UNITS

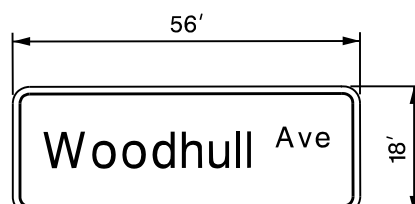
PROPOSED MAST ARM SIGN LEGEND



SIGN "A"

WHITE LEGEND/GREEN BACKGROUND

UC 8" C / LC 6" C FOR NAME
UC 5" C / LC 3.75" C FOR AVE
20" X 16" COUNTY SHIELD
YELLOW LEGEND/BLUE BACKGROUND COUNTY SHIELD

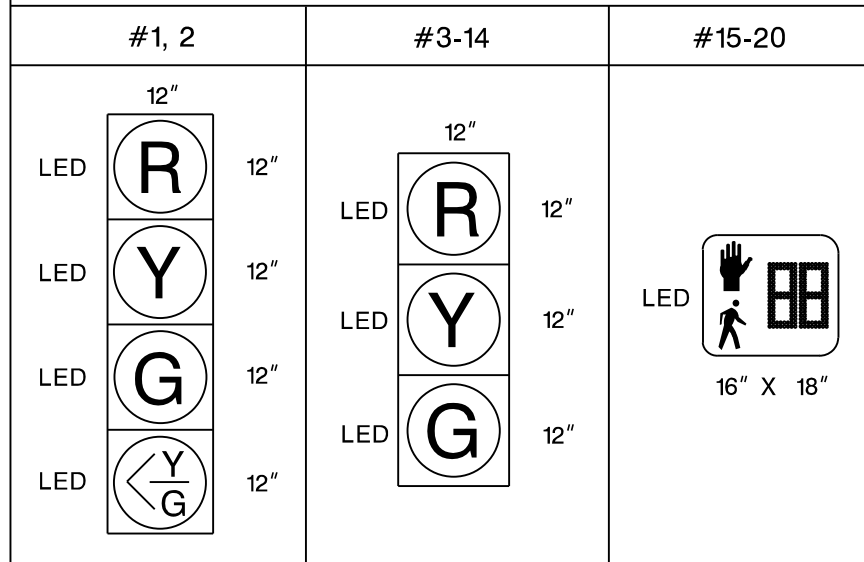


SIGN "B"

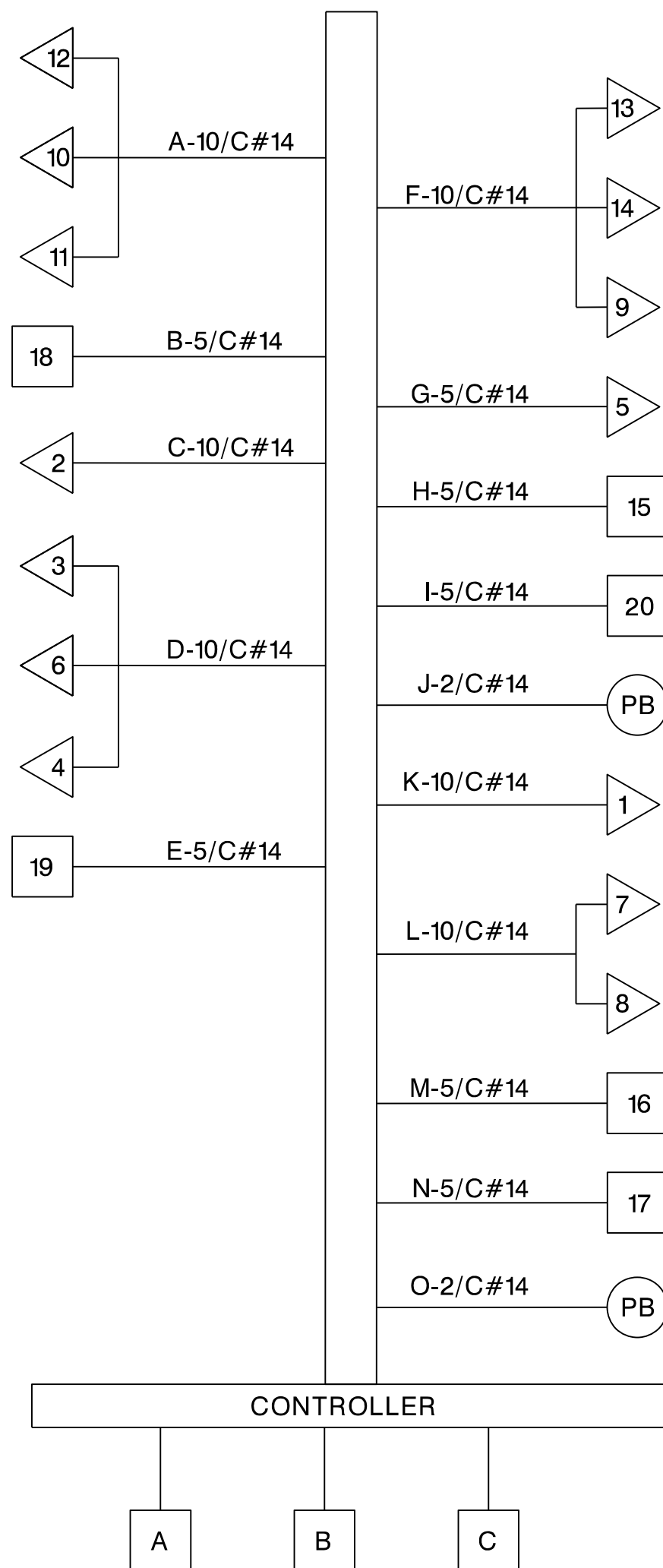
WHITE LEGEND/GREEN BACKGROUND

UC 8" C / LC 6" C FOR NAME
UC 5" C / LC 3.75" C FOR AVE

SIGNAL FACES



BLOCK WIRING DIAGRAM



A - VIDEO DETECTION UNIT



E-1
E-1

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING 900 BLOOMFIELD AVENUE, VERONA, NJ 07044 PHONE: (973)226-8500 FAX: (973) 226-7469			
EAGLE ROCK AVENUE AND WOODHULL AVENUE TOWNSHIP OF WEST ORANGE			
ELECTRICAL PLAN			
SANJEEV VARGHESE, P.E. COUNTY ENGINEER		N.J. LICENSE NO. 40597 DATE: _____	
GORDON METH, P.E. PROFESSIONAL ENGINEER		N.J. LICENSE NO. 42257 DATE: _____	
DWG. NO. 1	SCALE 1"=20'	DATE 08/04/11	RBA 7 Campus Drive, Suite 300 Parsippany, NJ 07054
FILE No.		PROJECT No. J3897.00	

PROSPECT AVENUE (C.R. 577) AND
EAGLE ROCK AVENUE (C.R. 611)
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY

rev. Jul. 8, 2010

TIMING SCHEDULE SEMI ACTUATED											
VEHICULAR ACTUATION PHASE	SIGNAL INDICATIONS								TIME (SECONDS)		
	1-3, 8-10	4-7, 11-12	13-16	17-19	20	21	22-23	24-27	I 140 sec.	II free	III 130 sec.
A. PROSPECT AVENUE (CR 577) LEFT TURNS CHANGE CLEARANCE	<G <Y <R	R R R	R R R	R R R	R R R	R / G> R / Y> R	DW DW DW	DW DW DW	6-20 3 1	6-20 3 1	6-26 3 1
B. PROSPECT AVENUE (CR 577) R.O.W. PEDESTRIAN CLEARANCE CHANGE CLEARANCE	<R <R <R <R	G G Y R	G G Y R	R R R R	R R R R	R R R R	DW DW DW DW	W FDW DW DW	78-12 20 4 2	10 20 4 2	68-14 20 4 2
C. EAGLE ROCK AVENUE (CR 611) WESTBOUND CHANGE CLEARANCE	<R <R <R	R R R	<G / G Y R	R R R	R R R	R R R	DW DW DW	DW DW DW	7-47 4 2	7-25 4 2	7-25 4 2
D. EAGLE ROCK AVENUE (CR 611) EASTBOUND CHANGE CLEARANCE	<R <R <R	R R R	R R R	<G / G Y R	G Y R	G Y R	DW DW DW	DW DW DW	7-19 4 2	7-23 4 2	7-23 4 2
EMERGENCY FLASH	<R	Y	Y	R	R	R	DARK	DARK			

PROSPECT AVENUE (C.R. 577) AND
EAGLE ROCK AVENUE (C.R. 611)
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY

rev. Jul. 8, 2010

PEDESTRIAN ACTUATION PHASE	SIGNAL INDICATIONS								TIME (SECONDS)		
	1-3, 8-10	4-7, 11-12	13-16	17-19	20	21	22-23	24-27	I 140 sec.	II free	III 130 sec.
A. PROSPECT AVENUE (CR 577) LEFT TURNS CHANGE CLEARANCE	<G <Y <R	R R R	R R R	R R R	R R R	R / G > R / Y > R	DW DW DW	DW DW DW	6-20 3 1	6-20 3 1	6-26 3 1
B. PROSPECT AVENUE (CR 577) R.O.W. PEDESTRIAN CLEARANCE CHANGE CLEARANCE	<R <R <R <R	G G Y R	G G Y R	R R R R	R R R R	R R R R	DW DW DW DW	W FDW DW DW	59-12 20 4 2	10 20 4 2	49-13 20 4 2
C. EAGLE ROCK AVENUE (CR 611) WESTBOUND PEDESTRIAN CLEARANCE VEHICLE CLEARANCE CHANGE CLEARANCE	<R <R <R <R <R	R R R R R	<G / G <G / G <G / G Y R	R R R R R	R R R R R	R R R R R	W FDW DW DW DW	DW DW DW DW DW	7 19 0-21 4 2	7 19 0 4 2	7 19 0 4 2
D. EAGLE ROCK AVENUE (CR 611) EASTBOUND CHANGE CLEARANCE	<R <R <R	R R R	R R R	<G / G Y R	G Y R	G Y R	DW DW DW	DW DW DW	7-19 4 2	7-23 4 2	7-23 4 2

PROSPECT AVENUE (C.R. 577) AND
EAGLE ROCK AVENUE (C.R. 611)
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY

rev. Jul. 8, 2010

NOTES:

1. The Vehicle Memory and Recall are to be off for Phases A, C, and D.
2. Vehicle extension shall be set at 2 seconds for Phases A, C, and D.
3. The manual controller is to be disconnected.
4. In Phase A, the Northbound and Southbound left turn arrows are to be capable of terminating independent of one another, with non-conflicting through movements released early upon termination.
5. The hours of operation are as follows:
 - Timing Plan I - 6:30 a.m. - 9:30 a.m., Monday-Friday
 - Timing Plan II - 10:00 p.m. - 6:30 a.m., Monday-Friday, 10:00 p.m.-9:00 a.m. Saturday-Sunday
 - Timing Plan III - all other times
6. An offset of 0 seconds is to be measured from the beginning of green for Prospect Avenue (Phase B) and various other intersections during Timing Plans I and III.
7. The intersection shall operate in free float mode (i.e. no background cycle) during Timing Plan II.

Eagle Rock Ave

Prospect Ave

UC 8" C / LC 6" C FOR NAME
UC 5" C / LC 3.75" C FOR AVE
20" X 16" COUNTY SHIELD
YELLOW LEGEND/BLUE BACKGROUND COUNTY SHIELD

UC 8" C / LC 6" C FOR NAME
UC 5" C / LC 3.75" C FOR AVE
20" X 16" COUNTY SHIELD
YELLOW LEGEND/BLUE BACKGROUND COUNTY SHIELD

REMOVE R3-7L _____
INSTALL R(NJ)3-8E (MOD.)
(APPROX. 200' FROM STOP LINE)

AREA OF PRESENCE
VIDEO DETECTION

REMOVE R3-7L
INSTALL R(NJ)3-8E (MOD.)

AREA OF PRESENCE VIDEO DETECTION

MATCH LINE A
160' FROM STOP LINE

NJ
TRANS
SYMBOL

PROSPECT AVENUE

PROSPECT AVENUE

MEET EXISTING STRIPING
APPROXIMATELY 275' FROM STOP LINE

PROPOSED SIGN LEGEND

R(NJ)3-8E(MOD

20' 10' 0 20' 4

SCALE IN FEET

M1-6 (577) M1-6 (611) M1-1 (280) R3-7L R(NJ)7-4X

M6-3 R3-2 NON MUTCD R2-1(35)






R10-11a R10-10L M3-1 M3-3

EAST WEST

TO

NORTH SOUTH

IF NOT OTHERWISE INDICATED, PAVEMENT MARKINGS
SHOULD CONFORM TO THE FOLLOWING:

- | | | |
|-----|---------------------|--|
| (A) | CENTER LINES | - 2-4" WIDE YELLOW LINES |
| (B) | STOP LINES | - 24" WIDE WHITE LINES |
| (C) | CROSSWALK LINES | - 8" WIDE WHITE LINES |
| (D) | GORE HATCHING | -24" WIDE YELLOW LINES SPACED
12' ON CENTER |
| (E) | LANE LINES | - 8" WIDE WHITE LINES |
| (F) | GORE LINES | - 2-4" WIDE YELLOW LINES |
| (G) | SKIP LINES (WHITE) | - 4" WIDE WHITE LINES
2' LONG, SPACED 4' APART |
| (H) | SKIP LINES (YELLOW) | - 2-4" WIDE YELLOW LINES
2' LONG, SPACED 4' APART |
| (I) | LANE SKIP LINES | - 8" WIDE WHITE LINES
10' LONG, SPACED 30' APART |

MATCH LINE B
138' FROM STOP LINE

ESSEX COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
900 BLOOMFIELD AVENUE, VERONA, NJ 07044
PHONE: (973)226-8500 FAX: (973) 226-7468

**EAGLE ROCK AVENUE AND PROSPECT AVENUE
TOWNSHIP OF WEST ORANGE**

TRAFFIC SIGNAL, SIGNING AND STRIPING PLAN

SANJEEV VARGHESE, P.E. N.J. LICENSE NO. 40597
COUNTY ENGINEER

N.J. LICENSE NO. 40597

DATE: _____

GORDON METH, P.E. N.J. LICENSE NO. 42257
PROFESSIONAL ENGINEER

N.J. LICENSE NO. 42257

DWG. NO. 06	SCALE 1"=20'	DATE 02/02/11	 THE RBA ENGINEERS • ARCHITECTS • PLANNERS 7 Campus Drive, Suite 300 Parsippany, N.J. 07054
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FILE No.	PROJECT No. J3897.00
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Appendix C

Capacity Analysis

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	555	5	7	452	0	4	0	5	0	0	0
Future Vol, veh/h	0	555	5	7	452	0	4	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	597	5	8	486	0	4	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	486	0	0	602	0	0	858	1101	301	799	1103	243
Stage 1	-	-	-	-	-	-	599	599	-	501	501	-
Stage 2	-	-	-	-	-	-	258	501	-	298	602	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1087	-	-	985	-	-	293	257	719	268	200	759
Stage 1	-	-	-	-	-	-	508	545	-	511	531	-
Stage 2	-	-	-	-	-	-	762	593	-	680	476	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1087	-	-	985	-	-	290	255	719	263	199	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	290	255	-	263	199	-
Stage 1	-	-	-	-	-	-	508	545	-	507	526	-
Stage 2	-	-	-	-	-	-	755	588	-	675	476	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.21	13.48	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	434	1087	-	-	55	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	0.008	-	-	-
HCM Ctrl Dly (s/v)	13.5	0	-	-	8.7	0.1	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	605	9	8	479	0	6	0	2	0	0	0
Future Vol, veh/h	0	605	9	8	479	0	6	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	3	0	0	1	0	17	0	0	0	0	0
Mvmt Flow	0	637	9	8	504	0	6	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	504	0	0	646	0	0	911	1163	323	839	1167	252
Stage 1	-	-	-	-	-	-	642	642	-	521	521	-
Stage 2	-	-	-	-	-	-	269	521	-	318	646	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.24	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.67	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1071	-	-	949	-	-	241	238	697	250	183	748
Stage 1	-	-	-	-	-	-	440	526	-	497	520	-
Stage 2	-	-	-	-	-	-	704	583	-	661	453	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1071	-	-	949	-	-	239	236	697	247	181	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	236	-	247	181	-
Stage 1	-	-	-	-	-	-	440	526	-	492	514	-
Stage 2	-	-	-	-	-	-	696	577	-	659	453	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.23	17.98	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	286	1071	-	-	59	-	-	-
HCM Lane V/C Ratio	0.029	-	-	-	0.009	-	-	-
HCM Ctrl Dly (s/v)	18	0	-	-	8.8	0.1	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	540	3	11	448	0	1	0	7	0	0	0
Future Vol, veh/h	0	540	3	11	448	0	1	0	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	557	3	11	462	0	1	0	7	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	462	0	0	560	0	0	812	1043	280	763	1044	231
Stage 1	-	-	-	-	-	-	558	558	-	485	485	-
Stage 2	-	-	-	-	-	-	254	485	-	278	560	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1110	-	-	1021	-	-	314	275	740	285	218	773
Stage 1	-	-	-	-	-	-	534	565	-	523	540	-
Stage 2	-	-	-	-	-	-	766	602	-	699	498	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1110	-	-	1021	-	-	310	272	740	279	215	773
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	272	-	279	215	-
Stage 1	-	-	-	-	-	-	534	565	-	517	534	-
Stage 2	-	-	-	-	-	-	756	594	-	693	498	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			0.31			10.78			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	631	1110	-	-	86	-	-	-
HCM Lane V/C Ratio	0.013	-	-	-	0.011	-	-	-
HCM Ctrl Dly (s/v)	10.8	0	-	-	8.6	0.1	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	584	5	7	477	0	4	0	5	0	0	0
Future Vol, veh/h	0	584	5	7	477	0	4	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	628	5	8	513	0	4	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	513	0	0	633	0	0	902	1159	317	842	1161	256
Stage 1	-	-	-	-	-	-	631	631	-	528	528	-
Stage 2	-	-	-	-	-	-	272	528	-	314	633	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1063	-	-	959	-	-	274	240	703	249	185	743
Stage 1	-	-	-	-	-	-	489	531	-	492	516	-
Stage 2	-	-	-	-	-	-	750	580	-	665	460	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1063	-	-	959	-	-	272	237	703	245	183	743
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	237	-	245	183	-
Stage 1	-	-	-	-	-	-	489	531	-	488	511	-
Stage 2	-	-	-	-	-	-	743	575	-	660	460	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			0.2			13.94			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	412	1063	-	-	52	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-	0.008	-	-	-
HCM Ctrl Dly (s/v)	13.9	0	-	-	8.8	0.1	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	659	9	8	527	0	6	0	2	0	0	0
Future Vol, veh/h	0	659	9	8	527	0	6	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	3	0	0	1	0	17	0	0	0	0	0
Mvmt Flow	0	694	9	8	555	0	6	0	2	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	555	0	0	703	0	0	993	1270	352	918	1275	277
Stage 1	-	-	-	-	-	-	698	698	-	572	572	-
Stage 2	-	-	-	-	-	-	294	572	-	347	703	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.24	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.67	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1026	-	-	904	-	-	212	210	670	218	157	720
Stage 1	-	-	-	-	-	-	409	500	-	463	492	-
Stage 2	-	-	-	-	-	-	682	558	-	635	426	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1026	-	-	904	-	-	210	207	670	215	155	720
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	207	-	215	155	-
Stage 1	-	-	-	-	-	-	409	500	-	458	486	-
Stage 2	-	-	-	-	-	-	674	552	-	633	426	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			0.23			19.72			0		
HCM LOS							C			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	253	1026	-	-	54	-	-	-				
HCM Lane V/C Ratio	0.033	-	-	-	0.009	-	-	-				
HCM Ctrl Dly (s/v)	19.7	0	-	-	9	0.1	-	0				
HCM Lane LOS	C	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	596	3	11	502	0	1	0	7	0	0	0
Future Vol, veh/h	0	596	3	11	502	0	1	0	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	614	3	11	518	0	1	0	7	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	518	0	0	618	0	0	897	1156	309	847	1158	259
Stage 1	-	-	-	-	-	-	616	616	-	540	540	-
Stage 2	-	-	-	-	-	-	281	540	-	307	618	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1059	-	-	972	-	-	276	240	711	246	185	741
Stage 1	-	-	-	-	-	-	498	537	-	484	509	-
Stage 2	-	-	-	-	-	-	741	574	-	672	468	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1059	-	-	972	-	-	272	237	711	241	183	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	237	-	241	183	-
Stage 1	-	-	-	-	-	-	498	537	-	477	502	-
Stage 2	-	-	-	-	-	-	731	566	-	665	468	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.3	11.17	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	592	1059	-	-	77	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-	0.012	-	-	-
HCM Ctrl Dly (s/v)	11.2	0	-	-	8.7	0.1	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	600	5	10	491	0	4	0	9	0	0	0
Future Vol, veh/h	0	600	5	10	491	0	4	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	645	5	11	528	0	4	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	528	0	0	651	0	0	933	1197	325	872	1200	264
Stage 1	-	-	-	-	-	-	648	648	-	549	549	-
Stage 2	-	-	-	-	-	-	285	549	-	323	651	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1049	-	-	945	-	-	262	229	695	236	175	735
Stage 1	-	-	-	-	-	-	479	523	-	477	504	-
Stage 2	-	-	-	-	-	-	738	569	-	657	451	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1049	-	-	945	-	-	258	226	695	230	172	735
Mov Cap-2 Maneuver	-	-	-	-	-	-	258	226	-	230	172	-
Stage 1	-	-	-	-	-	-	479	523	-	471	497	-
Stage 2	-	-	-	-	-	-	728	562	-	648	451	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.29	13.13	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	457	1049	-	-	72	-	-	-
HCM Lane V/C Ratio	0.031	-	-	-	0.011	-	-	-
HCM Ctrl Dly (s/v)	13.1	0	-	-	8.9	0.1	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	671	9	10	537	0	6	0	5	0	0	0
Future Vol, veh/h	0	671	9	10	537	0	6	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	3	0	0	1	0	17	0	0	0	0	0
Mvmt Flow	0	706	9	11	565	0	6	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	565	0	0	716	0	0	1015	1297	358	939	1302	283
Stage 1	-	-	-	-	-	-	711	711	-	586	586	-
Stage 2	-	-	-	-	-	-	304	586	-	353	716	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.24	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.24	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.67	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1017	-	-	894	-	-	205	203	664	210	151	715
Stage 1	-	-	-	-	-	-	402	495	-	453	484	-
Stage 2	-	-	-	-	-	-	674	551	-	630	420	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1017	-	-	894	-	-	202	200	664	206	149	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	200	-	206	149	-
Stage 1	-	-	-	-	-	-	402	495	-	447	477	-
Stage 2	-	-	-	-	-	-	664	544	-	625	420	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.29	17.7	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	295	1017	-	-	66	-	-	-
HCM Lane V/C Ratio	0.039	-	-	-	0.012	-	-	-
HCM Ctrl Dly (s/v)	17.7	0	-	-	9.1	0.1	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

10: Rosney Terrace/Mayfair Farms Driveway & Eagle Rock Avenue (CR 611)

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔			↔	
Traffic Vol, veh/h	0	620	3	17	525	0	1	0	13	0	0	0
Future Vol, veh/h	0	620	3	17	525	0	1	0	13	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	7	-	-	-6	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	639	3	18	541	0	1	0	13	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	541	0	0	642	0	0	946	1217	321	896	1219	271
Stage 1	-	-	-	-	-	-	641	641	-	576	576	-
Stage 2	-	-	-	-	-	-	306	576	-	320	642	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.9	5.9	6.6	7.7	6.7	7
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.7	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1038	-	-	952	-	-	256	223	699	227	170	728
Stage 1	-	-	-	-	-	-	484	526	-	460	489	-
Stage 2	-	-	-	-	-	-	720	556	-	660	455	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1038	-	-	952	-	-	251	219	699	218	166	728
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	219	-	218	166	-
Stage 1	-	-	-	-	-	-	484	526	-	450	479	-
Stage 2	-	-	-	-	-	-	705	544	-	647	455	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.45	10.95	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	620	1038	-	-	113	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-	0.018	-	-	-
HCM Ctrl Dly (s/v)	10.9	0	-	-	8.9	0.2	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	552	23	4	508	48	14	0	14	45	0	11
Future Volume (vph)	15	552	23	4	508	48	14	0	14	45	0	11
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.987			0.932				0.850
Flt Protected	0.950							0.976			0.950	
Satd. Flow (prot)	1909	3589	0	0	3709	0	0	1998	0	0	1604	1723
Flt Permitted	0.950				0.952			0.976			0.950	
Satd. Flow (perm)	1909	3589	0	0	3531	0	0	1998	0	0	1604	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		8			16							187
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
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%	6%	0%	25%	5%	6%	7%	0%	0%	20%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	632	0	0	615	0	0	30	0	0	49	12
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	26.0		26.0	26.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	32.0		32.0	32.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	41.0		32.0	32.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	12.9%	58.6%		45.7%	45.7%		17.1%	17.1%		24.3%	24.3%	24.3%
Maximum Green (s)	5.0	35.0		26.0	26.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0			5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	0.2		0.2	0.2		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	6.4	53.7			51.4			7.0			7.7	7.7
Actuated g/C Ratio	0.09	0.77			0.73			0.10			0.11	0.11
v/c Ratio	0.09	0.23			0.24			0.15			0.28	0.03
Control Delay (s/veh)	29.9	5.4			3.1			30.8			32.5	0.2
Queue Delay	0.0	0.0			0.1			0.0			0.1	0.0
Total Delay (s/veh)	29.9	5.4			3.2			30.8			32.6	0.2
LOS	C	A			A			C			C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		6.0			3.2			30.8			26.2	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	7	34			12			12			20	0
Queue Length 95th (ft)	23	109			m123			36			49	0
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	173	2756			2598			199			274	450
Starvation Cap Reductn	0	0			830			0			0	0
Spillback Cap Reductn	0	10			0			0			24	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.09	0.23			0.35			0.15			0.20	0.03

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 62 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay (s/veh): 6.2

Intersection LOS: A

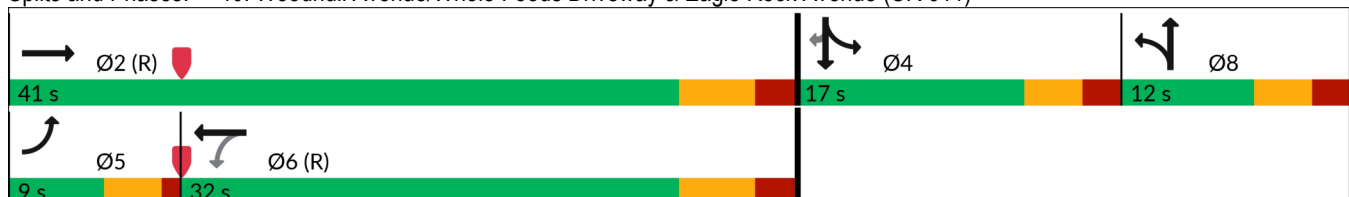
Intersection Capacity Utilization 46.7%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	555	36	9	367	253	36	14	44	216	13	119
Future Volume (vph)	69	555	36	9	367	253	36	14	44	216	13	119
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.940			0.937				0.850
Flt Protected	0.950				0.999			0.981			0.955	
Satd. Flow (prot)	1909	3680	0	0	3691	0	0	2066	0	0	1917	1723
Flt Permitted	0.950				0.945			0.981			0.955	
Satd. Flow (perm)	1909	3680	0	0	3491	0	0	2066	0	0	1917	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		14			258							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	3%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	603	0	0	641	0	0	96	0	0	233	121
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0			5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	0.2		0.2	0.2		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	33.5			28.1			7.0			10.9	10.9
Actuated g/C Ratio	0.08	0.52			0.43			0.11			0.17	0.17
v/c Ratio	0.48	0.32			0.39			0.43			0.73	0.27
Control Delay (s/veh)	40.5	10.6			5.4			33.8			39.9	2.3
Queue Delay	0.0	0.0			0.0			0.0			0.5	0.0
Total Delay (s/veh)	40.5	10.6			5.4			33.8			40.4	2.3
LOS	D	B			A			C			D	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		13.7			5.4			33.8			27.4	
Approach LOS		B			A			C			C	
Queue Length 50th (ft)	27	76			57			36			87	0
Queue Length 95th (ft)	#69	111			44			77			#171	10
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	146	1904			1656			222			353	481
Starvation Cap Reductn	0	0			0			0			0	0
Spillback Cap Reductn	0	143			0			0			14	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.48	0.34			0.39			0.43			0.69	0.25

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 14.5

Intersection LOS: B

Intersection Capacity Utilization 67.3%

ICU Level of Service C

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	370	30	11	317	212	31	16	38	186	20	99
Future Volume (vph)	71	370	30	11	317	212	31	16	38	186	20	99
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.941			0.939				0.850
Flt Protected	0.950				0.999			0.982			0.957	
Satd. Flow (prot)	1890	3742	0	0	3680	0	0	2096	0	0	1922	1723
Flt Permitted	0.950				0.944			0.982			0.957	
Satd. Flow (perm)	1890	3742	0	0	3478	0	0	2096	0	0	1922	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		17			219							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	412	0	0	557	0	0	87	0	0	213	102
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0			5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	0.2		0.2	0.2		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	32.4			25.2			7.0			12.0	12.0
Actuated g/C Ratio	0.08	0.50			0.39			0.11			0.18	0.18
v/c Ratio	0.50	0.22			0.38			0.39			0.60	0.21
Control Delay (s/veh)	42.1	10.0			2.9			32.5			32.3	1.0
Queue Delay	0.0	0.0			0.0			0.0			0.0	0.0
Total Delay (s/veh)	42.1	10.0			2.9			32.5			32.3	1.0
LOS	D	A			A			C			C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		14.8			2.9			32.5			22.2	
Approach LOS		B			A			C			C	
Queue Length 50th (ft)	29	47			58			33			78	0
Queue Length 95th (ft)	#75	73			m44			71			141	1
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	145	1873			1482			225			354	481
Starvation Cap Reductn	0	0			0			0			0	0
Spillback Cap Reductn	0	0			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.50	0.22			0.38			0.39			0.60	0.21

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay (s/veh): 12.9

Intersection LOS: B

Intersection Capacity Utilization 66.1%

ICU Level of Service C

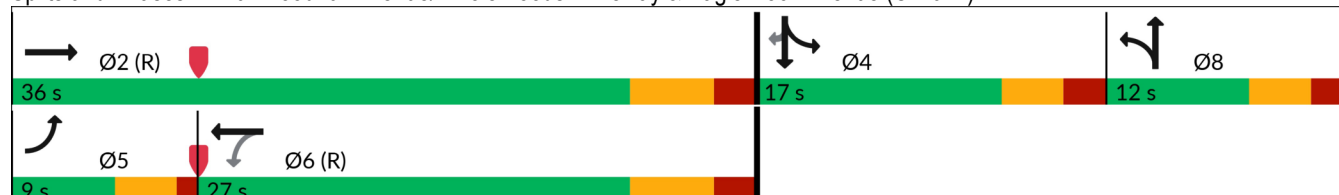
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	569	24	4	526	59	15	0	15	54	0	17
Future Volume (vph)	22	569	24	4	526	59	15	0	15	54	0	17
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.994			0.985			0.932				0.850
Flt Protected	0.950							0.976		0.950	0.950	
Satd. Flow (prot)	1909	3589	0	0	3701	0	0	1998	0	1524	1524	1723
Flt Permitted	0.950				0.952			0.976		0.950	0.950	
Satd. Flow (perm)	1909	3589	0	0	3523	0	0	1998	0	1524	1524	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		8			19							187
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
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%	6%	0%	25%	5%	6%	7%	0%	0%	20%	0%	0%
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	24	651	0	0	647	0	0	32	0	29	30	19
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	26.0		26.0	26.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	32.0		32.0	32.0		12.0	12.0		17.0	17.0	17.0
Total Split (s)	9.0	41.0		32.0	32.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	12.9%	58.6%		45.7%	45.7%		17.1%	17.1%		24.3%	24.3%	24.3%
Maximum Green (s)	5.0	35.0		26.0	26.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	54.1			50.5			7.0		7.3	7.3	7.3
Actuated g/C Ratio	0.07	0.77			0.72			0.10		0.10	0.10	0.10
v/c Ratio	0.18	0.23			0.25			0.16		0.18	0.19	0.05
Control Delay (s/veh)	33.8	5.1			3.2			31.0		31.4	31.6	0.3
Queue Delay	0.0	0.0			0.1			0.0		0.0	0.1	0.0
Total Delay (s/veh)	33.8	5.1			3.3			31.0		31.5	31.6	0.3
LOS	C	A			A			C		C	C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		6.1			3.3			31.0			23.9	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	10	36			12			13		14	12	0
Queue Length 95th (ft)	32	108			m97			37		42	36	0
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	136	2777			2548			199		261	261	450
Starvation Cap Reductn	0	0			873			0		0	0	0
Spillback Cap Reductn	0	63			0			0		23	23	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.18	0.24			0.39			0.16		0.12	0.13	0.04

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 62 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay (s/veh): 6.4

Intersection LOS: A

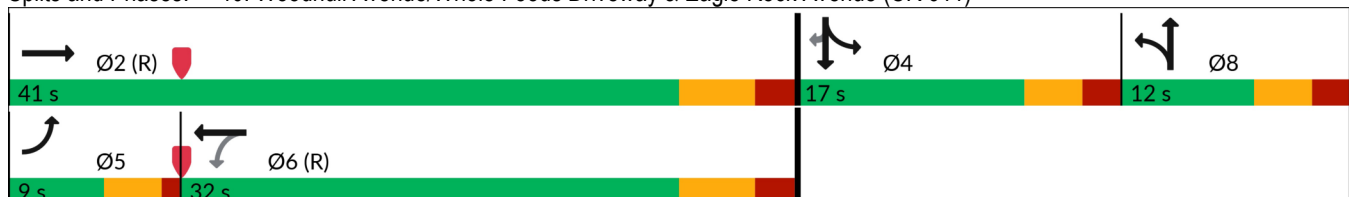
Intersection Capacity Utilization 46.7%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	571	37	9	376	306	37	16	46	257	16	152
Future Volume (vph)	101	571	37	9	376	306	37	16	46	257	16	152
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.991			0.934			0.937				0.850
Flt Protected	0.950				0.999			0.982		0.950	0.958	
Satd. Flow (prot)	1909	3680	0	0	3669	0	0	2069	0	1811	1828	1723
Flt Permitted	0.950				0.945			0.982		0.950	0.958	
Satd. Flow (perm)	1909	3680	0	0	3471	0	0	2069	0	1811	1828	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		14			312							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	3%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	103	621	0	0	705	0	0	101	0	139	139	155
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	34.8			27.6			7.0		9.6	9.6	9.6
Actuated g/C Ratio	0.08	0.54			0.42			0.11		0.15	0.15	0.15
v/c Ratio	0.71	0.31			0.43			0.45		0.52	0.52	0.37
Control Delay (s/veh)	57.6	9.9			4.5			34.4		32.5	32.3	4.6
Queue Delay	0.0	0.0			0.1			0.0		0.4	0.4	0.0
Total Delay (s/veh)	57.6	9.9			4.6			34.4		32.9	32.7	4.6
LOS	E	A			A			C		C	C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		16.7			4.6			34.4			22.7	
Approach LOS		B			A			C			C	
Queue Length 50th (ft)	41	72			28			38		54	54	0
Queue Length 95th (ft)	#111	114			m47			81		103	102	26
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	146	1979			1655			222		334	337	481
Starvation Cap Reductn	0	0			219			0		0	0	0
Spillback Cap Reductn	0	143			0			0		34	34	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.71	0.34			0.49			0.45		0.46	0.46	0.32

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 14.6

Intersection LOS: B

Intersection Capacity Utilization 63.7%

ICU Level of Service B

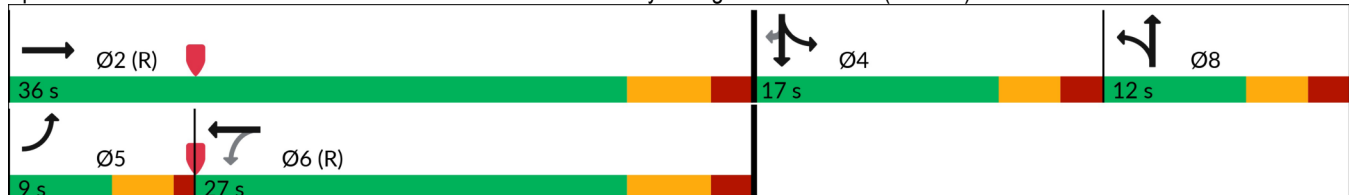
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	378	31	11	324	274	32	20	40	237	21	138
Future Volume (vph)	108	378	31	11	324	274	32	20	40	237	21	138
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.989			0.933			0.942				0.850
Flt Protected	0.950				0.999			0.983		0.950	0.960	
Satd. Flow (prot)	1890	3742	0	0	3649	0	0	2105	0	1811	1833	1723
Flt Permitted	0.950				0.945			0.983		0.950	0.960	
Satd. Flow (perm)	1890	3742	0	0	3452	0	0	2105	0	1811	1833	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		17			282							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)										46%		
Lane Group Flow (vph)	111	422	0	0	627	0	0	95	0	132	134	142
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	35.0			27.8			7.0		9.4	9.4	9.4
Actuated g/C Ratio	0.08	0.54			0.43			0.11		0.14	0.14	0.14
v/c Ratio	0.77	0.21			0.38			0.42		0.50	0.51	0.34
Control Delay (s/veh)	64.9	9.0			17.0			33.3		32.1	32.0	3.9
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Delay (s/veh)	64.9	9.0			17.0			33.3		32.1	32.0	3.9
LOS	E	A			B			C		C	C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		20.6			17.0			33.3			22.2	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	45	44			238			36		51	52	0
Queue Length 95th (ft)	#123	74			m288			77		98	98	20
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	145	2021			1636			226		334	338	481
Starvation Cap Reductn	0	0			0			0		0	0	0
Spillback Cap Reductn	0	0			0			0		0	0	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.77	0.21			0.38			0.42		0.40	0.40	0.30

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay (s/veh): 20.4

Intersection LOS: C

Intersection Capacity Utilization 62.3%

ICU Level of Service B

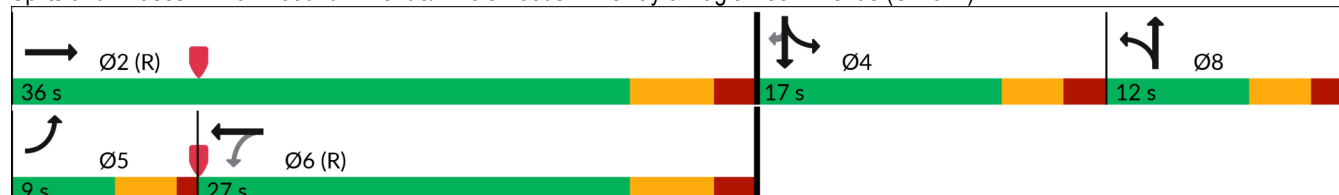
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	586	24	4	546	59	15	0	15	54	0	17
Future Volume (vph)	22	586	24	4	546	59	15	0	15	54	0	17
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.994			0.985			0.932				0.850
Flt Protected	0.950							0.976		0.950	0.950	
Satd. Flow (prot)	1909	3589	0	0	3701	0	0	1998	0	1524	1524	1723
Flt Permitted	0.950				0.952			0.976		0.950	0.950	
Satd. Flow (perm)	1909	3589	0	0	3523	0	0	1998	0	1524	1524	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		8			19							187
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
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%	6%	0%	25%	5%	6%	7%	0%	0%	20%	0%	0%
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	24	670	0	0	669	0	0	32	0	29	30	19
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	26.0		26.0	26.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	32.0		32.0	32.0		23.0	23.0		23.0	23.0	23.0
Total Split (s)	9.0	41.0		32.0	32.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	12.9%	58.6%		45.7%	45.7%		17.1%	17.1%		24.3%	24.3%	24.3%
Maximum Green (s)	5.0	35.0		26.0	26.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	54.1			50.5			7.0		7.3	7.3	7.3
Actuated g/C Ratio	0.07	0.77			0.72			0.10		0.10	0.10	0.10
v/c Ratio	0.18	0.24			0.26			0.16		0.18	0.19	0.05
Control Delay (s/veh)	33.8	5.1			3.2			31.0		31.4	31.6	0.3
Queue Delay	0.0	0.0			0.1			0.0		0.0	0.1	0.0
Total Delay (s/veh)	33.8	5.1			3.3			31.0		31.5	31.6	0.3
LOS	C	A			A			C		C	C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		6.1			3.3			31.0			23.9	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	10	37			12			13		14	12	0
Queue Length 95th (ft)	32	111			m100			37		42	36	0
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	136	2777			2548			199		261	261	450
Starvation Cap Reductn	0	0			868			0		0	0	0
Spillback Cap Reductn	0	76			0			0		23	23	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.18	0.25			0.40			0.16		0.12	0.13	0.04

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 62 (89%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay (s/veh): 6.3

Intersection LOS: A

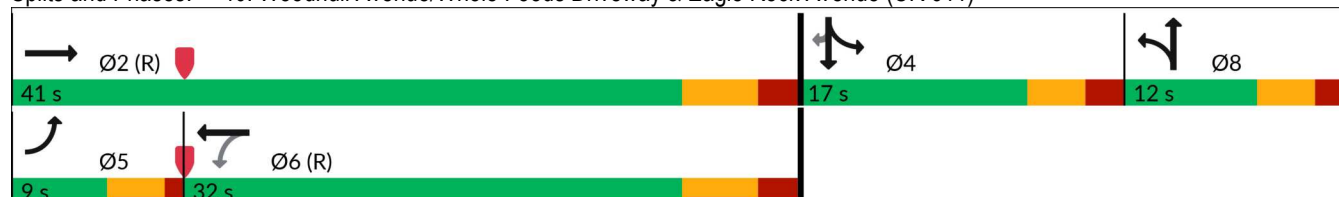
Intersection Capacity Utilization 46.7%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	583	37	9	391	306	37	16	46	257	16	152
Future Volume (vph)	101	583	37	9	391	306	37	16	46	257	16	152
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.991			0.935			0.937				0.850
Flt Protected	0.950				0.999			0.982		0.950	0.958	
Satd. Flow (prot)	1909	3680	0	0	3672	0	0	2069	0	1811	1828	1723
Flt Permitted	0.950				0.945			0.982		0.950	0.958	
Satd. Flow (perm)	1909	3680	0	0	3474	0	0	2069	0	1811	1828	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		13			312							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	3%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	103	633	0	0	720	0	0	101	0	139	139	155
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	34.8			27.6			7.0		9.6	9.6	9.6
Actuated g/C Ratio	0.08	0.54			0.42			0.11		0.15	0.15	0.15
v/c Ratio	0.71	0.32			0.43			0.45		0.52	0.52	0.37
Control Delay (s/veh)	57.6	10.0			4.5			34.4		32.5	32.3	4.6
Queue Delay	0.0	0.0			0.1			0.0		0.4	0.4	0.0
Total Delay (s/veh)	57.6	10.0			4.6			34.4		32.9	32.7	4.6
LOS	E	B			A			C		C	C	A

40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		16.7			4.6			34.4			22.7	
Approach LOS		B			A			C			C	
Queue Length 50th (ft)	41	74			28			38		54	54	0
Queue Length 95th (ft)	#111	117			m48			81		103	102	26
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	146	1978			1656			222		334	337	481
Starvation Cap Reductn	0	0			219			0		0	0	0
Spillback Cap Reductn	0	143			0			0		37	37	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.71	0.34			0.50			0.45		0.47	0.46	0.32

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 14.5

Intersection LOS: B

Intersection Capacity Utilization 64.1%

ICU Level of Service C

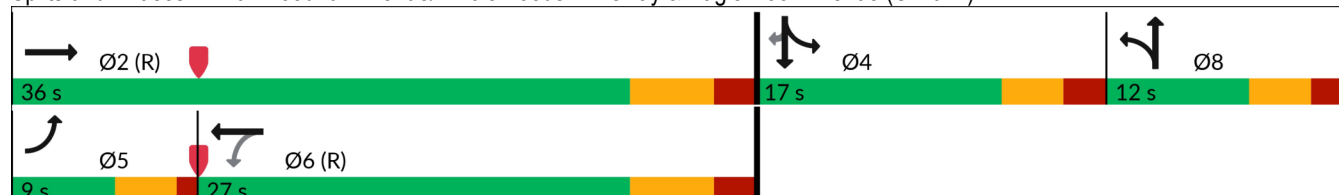
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	407	31	11	354	274	32	20	40	237	21	138
Future Volume (vph)	108	407	31	11	354	274	32	20	40	237	21	138
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	14	14	14	12	12	12
Grade (%)		2%			-5%			-3%			7%	
Storage Length (ft)	165		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		1
Taper Length (ft)	55			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.989			0.936			0.942				0.850
Flt Protected	0.950				0.999			0.983		0.950	0.960	
Satd. Flow (prot)	1890	3742	0	0	3661	0	0	2105	0	1811	1833	1723
Flt Permitted	0.950				0.945			0.983		0.950	0.960	
Satd. Flow (perm)	1890	3742	0	0	3463	0	0	2105	0	1811	1833	1723
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		16			282							201
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		420			321			695			368	
Travel Time (s)		8.2			6.3			19.0			10.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%
Shared Lane Traffic (%)										46%		
Lane Group Flow (vph)	111	452	0	0	658	0	0	95	0	132	134	142
Turn Type	Prot	NA		Perm	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2			6		8	8		4	4	
Permitted Phases				6								4
Detector Phase	5	2		6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	21.0		21.0	21.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.0	27.0		27.0	27.0		12.0	12.0		12.0	12.0	12.0
Total Split (s)	9.0	36.0		27.0	27.0		12.0	12.0		17.0	17.0	17.0
Total Split (%)	13.8%	55.4%		41.5%	41.5%		18.5%	18.5%		26.2%	26.2%	26.2%
Maximum Green (s)	5.0	30.0		21.0	21.0		7.0	7.0		12.0	12.0	12.0
Yellow Time (s)	3.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0			6.0			5.0		5.0	5.0	5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	3.0		3.0	3.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max		None	None		None	None	None
Act Effect Green (s)	5.0	35.0			27.8			7.0		9.4	9.4	9.4
Actuated g/C Ratio	0.08	0.54			0.43			0.11		0.14	0.14	0.14
v/c Ratio	0.77	0.22			0.40			0.42		0.50	0.51	0.34
Control Delay (s/veh)	64.9	9.1			1.9			33.3		32.1	32.0	3.9
Queue Delay	0.0	0.0			0.1			0.0		0.0	0.0	0.0
Total Delay (s/veh)	64.9	9.1			2.0			33.3		32.1	32.0	3.9
LOS	E	A			A			C		C	C	A

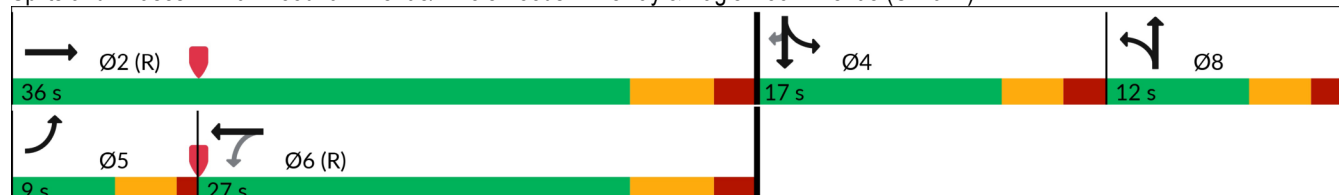
40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		20.1			2.0			33.3			22.2	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)	45	47			25			36		51	52	0
Queue Length 95th (ft)	#123	80			m52			77		98	98	20
Internal Link Dist (ft)		340			241			615			288	
Turn Bay Length (ft)	165											
Base Capacity (vph)	145	2021			1641			226		334	338	481
Starvation Cap Reductn	0	0			255			0		0	0	0
Spillback Cap Reductn	0	0			0			0		0	0	0
Storage Cap Reductn	0	0			0			0		0	0	0
Reduced v/c Ratio	0.77	0.22			0.47			0.42		0.40	0.40	0.30

Intersection Summary

Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 52 (80%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay (s/veh): 14.5	Intersection LOS: B
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 40: Woodhull Avenue/Whole Foods Driveway & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	315	230	1035	332	76	181	834	700	55	736	47
Future Volume (vph)	46	315	230	1035	332	76	181	834	700	55	736	47
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.991	
Flt Protected		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (prot)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Flt Permitted		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (perm)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			231		7				340		4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	9%	7%	4%	2%	5%	14%	6%	6%	4%	7%	3%	4%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	368	235	528	945	0	185	851	714	56	799	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Minimum Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (%)	17.9%	17.9%	17.9%	37.9%	37.9%		17.1%	27.1%	27.1%	17.1%	27.1%	
Maximum Green (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	0.2	0.2	2.0	0.2	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		19.0	19.0	47.0	47.0		20.0	36.8	36.8	20.0	32.0	
Actuated g/C Ratio		0.14	0.14	0.34	0.34		0.14	0.26	0.26	0.14	0.23	
v/c Ratio		0.78	0.56	0.90	0.86dl		0.70	0.88	1.03	0.22	0.96	
Control Delay (s/veh)		74.7	21.8	64.2	48.7		72.4	61.5	69.0	55.7	75.6	
Queue Delay		0.0	0.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		74.7	22.3	64.2	48.7		72.4	61.5	69.0	55.7	75.6	
LOS		E	C	E	D		E	E	E	E	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		54.3			54.2			65.7			74.3	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)		192	0	510	445		171	~436	~500	48	388	
Queue Length 95th (ft)		#260	140	#748	539		#265	#586	#755	94	#524	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		470	418	586	1167		263	971	693	252	833	
Starvation Cap Reductn		0	32	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.78	0.61	0.90	0.81		0.70	0.88	1.03	0.22	0.96	

Intersection Summary

Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay (s/veh): 62.2	Intersection LOS: E
Intersection Capacity Utilization 116.7%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
dl Defacto Left Lane. Recode with 1 though lane as a left lane.	

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

	Ø1		Ø2 (R)		Ø4		Ø8
24 s		38 s		53 s		25 s	
	Ø5		Ø6 (R)				
24 s		38 s					

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	444	271	543	215	42	272	764	924	90	625	142
Future Volume (vph)	100	444	271	543	215	42	272	764	924	90	625	142
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.972	
Flt Protected		0.991		0.950	0.975		0.950			0.950		
Satd. Flow (prot)	0	3641	1625	1746	3556	0	1938	3876	1734	1871	3609	0
Flt Permitted		0.991		0.950	0.975		0.950			0.950		
Satd. Flow (perm)	0	3641	1625	1746	3556	0	1938	3876	1734	1871	3609	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277		6				551		20	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	3%	2%	1%	2%	1%	1%	1%	1%	2%	1%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	555	277	277	539	0	278	780	943	92	783	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	0.2	0.2	2.0	0.2	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.86	0.54	0.83	0.78		0.72	0.77	1.10	0.25	0.82	
Control Delay (s/veh)		64.2	15.1	71.3	58.4		60.2	50.4	79.7	45.9	51.9	
Queue Delay		12.1	0.8	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		76.3	15.9	71.3	58.4		60.2	50.4	79.7	45.9	51.9	
LOS		E	B	E	E		E	D	E	D	D	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		56.2			62.8			65.6			51.3	
Approach LOS		E			E			E			D	
Queue Length 50th (ft)		234	10	252	239		223	323	~537	66	325	
Queue Length 95th (ft)		#335	116	#413	308		324	400	#797	118	405	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		644	515	335	688		387	1013	860	374	958	
Starvation Cap Reductn		79	73	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.98	0.63	0.83	0.78		0.72	0.77	1.10	0.25	0.82	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay (s/veh): 60.6

Intersection LOS: E

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

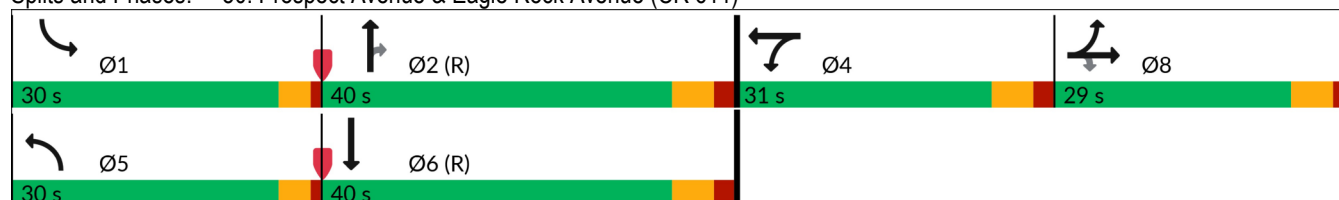
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	225	277	544	244	69	271	761	603	93	789	25
Future Volume (vph)	92	225	277	544	244	69	271	761	603	93	789	25
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.982				0.850		0.995	
Flt Protected		0.986		0.950	0.978		0.950			0.950		
Satd. Flow (prot)	0	3689	1657	1764	3585	0	1919	3876	1734	1890	3689	0
Flt Permitted		0.986		0.950	0.978		0.950			0.950		
Satd. Flow (perm)	0	3689	1657	1764	3585	0	1919	3876	1734	1890	3689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			283		10				361		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%	2%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	324	283	289	585	0	277	777	615	95	831	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	0.2	0.2	2.0	0.2	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.50	0.54	0.85	0.84		0.72	0.77	0.85	0.25	0.86	
Control Delay (s/veh)		49.2	14.2	74.0	61.6		60.6	50.3	31.1	45.9	55.9	
Queue Delay		0.5	0.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		49.6	14.9	74.0	61.6		60.6	50.3	31.1	45.9	55.9	
LOS		D	B	E	E		E	D	C	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		33.5			65.7			44.9			54.8	
Approach LOS		C			E			D			D	
Queue Length 50th (ft)		126	6	262	259		224	322	225	68	357	
Queue Length 95th (ft)		181	108	#430	#348		326	397	#441	120	#445	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		652	526	339	697		383	1013	720	378	966	
Starvation Cap Reductn		90	70	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.58	0.62	0.85	0.84		0.72	0.77	0.85	0.25	0.86	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 49.9

Intersection LOS: D

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

	Ø1		Ø2 (R)		Ø4		Ø8
30 s		40 s		31 s		29 s	
	Ø5		Ø6 (R)				
30 s		40 s					

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	340	247	1077	348	79	192	871	728	58	771	49
Future Volume (vph)	51	340	247	1077	348	79	192	871	728	58	771	49
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.991	
Flt Protected		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (prot)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Flt Permitted		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (perm)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			229		7				339		4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	9%	7%	4%	2%	5%	14%	6%	6%	4%	7%	3%	4%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	399	252	549	986	0	196	889	743	59	837	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Minimum Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (%)	17.9%	17.9%	17.9%	37.9%	37.9%		17.1%	27.1%	27.1%	17.1%	27.1%	
Maximum Green (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		19.0	19.0	47.0	47.0		20.0	36.8	36.8	20.0	32.0	
Actuated g/C Ratio		0.14	0.14	0.34	0.34		0.14	0.26	0.26	0.14	0.23	
v/c Ratio		0.85	0.61	0.94	0.89		0.75	0.92	1.07	0.23	1.00	
Control Delay (s/veh)		79.8	24.6	69.8	50.8		75.4	65.4	82.5	56.0	85.4	
Queue Delay		0.0	0.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		79.8	25.2	69.8	50.8		75.4	65.4	82.5	56.0	85.4	
LOS		E	C	E	D		E	E	F	E	F	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		58.7			57.6			73.4			83.5	
Approach LOS		E			E			E			F	
Queue Length 50th (ft)		208	43	540	471		182	~486	~559	51	~415	
Queue Length 95th (ft)		#295	155	#795	570		#297	#627	#816	99	#563	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		470	416	586	1167		263	971	692	252	833	
Starvation Cap Reductn		0	29	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.85	0.65	0.94	0.84		0.75	0.92	1.07	0.23	1.00	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay (s/veh): 68.3

Intersection LOS: E

Intersection Capacity Utilization 116.7%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

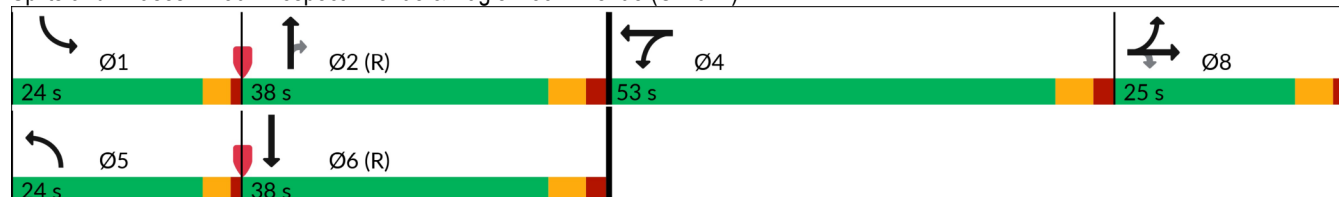
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	476	293	565	241	45	302	811	961	97	676	148
Future Volume (vph)	105	476	293	565	241	45	302	811	961	97	676	148
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.973	
Flt Protected		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (prot)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Flt Permitted		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (perm)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			299		6				540		19	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	3%	2%	1%	2%	1%	1%	1%	1%	2%	1%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	593	299	288	581	0	308	828	981	99	841	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.92	0.56	0.86	0.84		0.80	0.82	1.15	0.26	0.88	
Control Delay (s/veh)		70.1	14.8	75.2	62.4		65.6	52.7	101.7	46.2	56.4	
Queue Delay		12.7	0.8	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		82.8	15.6	75.2	62.4		65.6	52.7	101.7	46.2	56.4	
LOS		F	B	E	E		E	D	F	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		60.3			66.6			77.3			55.4	
Approach LOS		E			E			E			E	
Queue Length 50th (ft)		245	7	264	261		251	348	~620	72	357	
Queue Length 95th (ft)		#366	119	#438	#353		#389	428	#882	126	#465	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		644	533	335	689		387	1013	852	374	958	
Starvation Cap Reductn		52	70	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		1.00	0.65	0.86	0.84		0.80	0.82	1.15	0.26	0.88	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay (s/veh): 67.9

Intersection LOS: E

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

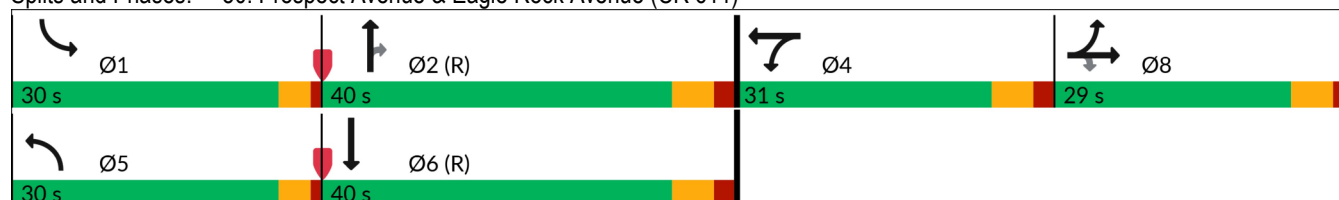
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	253	306	566	277	73	306	828	627	101	868	26
Future Volume (vph)	96	253	306	566	277	73	306	828	627	101	868	26
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.982				0.850		0.996	
Flt Protected		0.986		0.950	0.979		0.950			0.950		
Satd. Flow (prot)	0	3689	1657	1764	3590	0	1919	3876	1734	1890	3693	0
Flt Permitted		0.986		0.950	0.979		0.950			0.950		
Satd. Flow (perm)	0	3689	1657	1764	3590	0	1919	3876	1734	1890	3693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			312		9				345		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%	2%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	356	312	312	623	0	312	845	640	103	913	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4						2			
Detector Phase	4	4	4	8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.55	0.57	0.92	0.89		0.81	0.83	0.90	0.27	0.94	
Control Delay (s/veh)		49.5	13.1	84.0	66.9		67.4	53.7	38.6	46.3	65.3	
Queue Delay		0.7	1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		50.2	14.0	84.0	66.9		67.4	53.7	38.6	46.3	65.3	
LOS		D	B	F	E		E	D	D	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		33.3			72.6			50.7			63.4	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)		133	0	289	280		258	358	272	74	404	
Queue Length 95th (ft)		174	99	#483	#387		#404	438	#509	129	#538	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		652	549	339	697		383	1013	708	378	967	
Starvation Cap Reductn		92	80	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.64	0.67	0.92	0.89		0.81	0.83	0.90	0.27	0.94	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 55.6

Intersection LOS: E

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

	Ø1		Ø2 (R)		Ø4		Ø8
30 s		40 s		29 s		31 s	
	Ø5		Ø6 (R)				
30 s		40 s					

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	347	257	1077	356	79	204	871	728	58	771	49
Future Volume (vph)	51	347	257	1077	356	79	204	871	728	58	771	49
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.991	
Flt Protected		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (prot)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Flt Permitted		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (perm)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			229		7				339		4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	9%	7%	4%	2%	5%	14%	6%	6%	4%	7%	3%	4%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	406	262	549	994	0	208	889	743	59	837	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Minimum Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	38.0	
Total Split (%)	17.9%	17.9%	17.9%	37.9%	37.9%		17.1%	27.1%	27.1%	17.1%	27.1%	
Maximum Green (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		19.0	19.0	47.0	47.0		20.0	36.8	36.8	20.0	32.0	
Actuated g/C Ratio		0.14	0.14	0.34	0.34		0.14	0.26	0.26	0.14	0.23	
v/c Ratio		0.86	0.63	0.94	0.89		0.79	0.92	1.07	0.23	1.00	
Control Delay (s/veh)		81.3	26.3	69.8	51.2		79.4	65.4	82.5	56.0	85.4	
Queue Delay		0.0	0.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		81.3	27.0	69.8	51.2		79.4	65.4	82.5	56.0	85.4	
LOS		F	C	E	D		E	E	F	E	F	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		60.0			57.8			73.9			83.5	
Approach LOS		E			E			E			F	
Queue Length 50th (ft)		217	52	540	477		194	~486	~559	51	~415	
Queue Length 95th (ft)		#305	166	#795	576		#323	#627	#816	99	#563	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		470	416	586	1167		263	971	692	252	833	
Starvation Cap Reductn		0	29	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.86	0.68	0.94	0.85		0.79	0.92	1.07	0.23	1.00	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay (s/veh): 68.7

Intersection LOS: E

Intersection Capacity Utilization 116.7%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

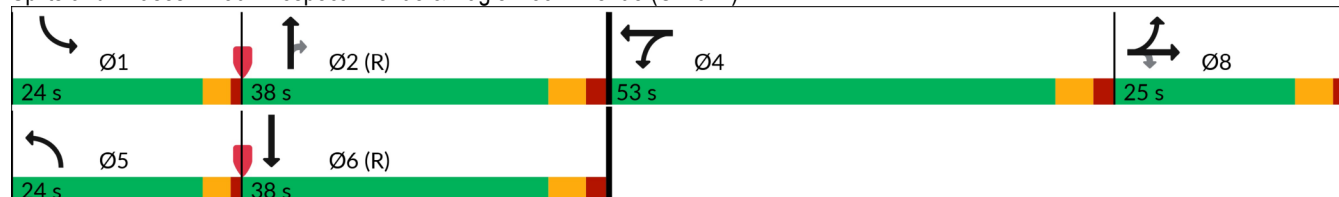
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	347	257	1077	356	79	204	871	728	58	771	49
Future Volume (vph)	51	347	257	1077	356	79	204	871	728	58	771	49
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.991	
Flt Protected		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (prot)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Flt Permitted		0.994		0.950	0.973		0.950			0.950		
Satd. Flow (perm)	0	3467	1609	1746	3464	0	1847	3693	1684	1766	3635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			235		7				339		4	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	9%	7%	4%	2%	5%	14%	6%	6%	4%	7%	3%	4%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	406	262	549	994	0	208	889	743	59	837	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	19.0	19.0	19.0	47.0	47.0		20.0	32.0	32.0	20.0	31.0	
Minimum Split (s)	25.0	25.0	25.0	53.0	53.0		24.0	38.0	38.0	24.0	37.0	
Total Split (s)	27.0	27.0	27.0	51.0	51.0		25.0	38.0	38.0	24.0	37.0	
Total Split (%)	19.3%	19.3%	19.3%	36.4%	36.4%		17.9%	27.1%	27.1%	17.1%	26.4%	
Maximum Green (s)	21.0	21.0	21.0	45.0	45.0		21.0	32.0	32.0	20.0	31.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		20.2	20.2	45.0	45.0		20.5	37.6	37.6	20.0	32.3	
Actuated g/C Ratio		0.14	0.14	0.32	0.32		0.15	0.27	0.27	0.14	0.23	
v/c Ratio		0.81	0.61	0.98	0.93dl		0.77	0.90	1.06	0.23	1.00	
Control Delay (s/veh)		74.5	23.9	80.0	55.7		76.5	62.7	78.5	56.0	83.2	
Queue Delay		2.7	0.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		77.2	24.6	80.0	55.7		76.5	62.7	78.5	56.0	83.2	
LOS		E	C	E	E		E	E	E	E	F	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		56.5			64.4			70.6			81.4	
Approach LOS		E			E			E			F	
Queue Length 50th (ft)		210	47	552	488		193	~486	~559	51	~435	
Queue Length 95th (ft)		276	167	#821	#600		#310	#627	#816	99	#577	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		520	441	561	1118		277	991	700	252	840	
Starvation Cap Reductn		47	36	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.86	0.65	0.98	0.89		0.75	0.90	1.06	0.23	1.00	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay (s/veh): 68.7

Intersection LOS: E

Intersection Capacity Utilization 116.7%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

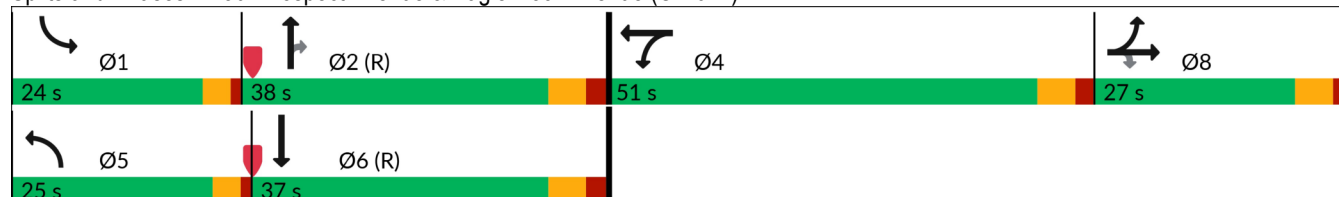
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	481	300	565	247	45	311	811	961	97	676	148
Future Volume (vph)	105	481	300	565	247	45	311	811	961	97	676	148
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.973	
Flt Protected		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (prot)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Flt Permitted		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (perm)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			306		6				540		19	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	3%	2%	1%	2%	1%	1%	1%	1%	2%	1%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	598	306	288	587	0	317	828	981	99	841	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.93	0.57	0.86	0.85		0.82	0.82	1.15	0.26	0.88	
Control Delay (s/veh)		71.3	14.9	75.2	63.1		67.6	52.7	101.7	46.2	56.4	
Queue Delay		14.2	0.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		85.5	15.8	75.2	63.1		67.6	52.7	101.7	46.2	56.4	
LOS		F	B	E	E		E	D	F	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		61.9			67.1			77.5			55.4	
Approach LOS		E			E			E			E	
Queue Length 50th (ft)		247	9	264	264		260	348	~620	72	357	
Queue Length 95th (ft)		#372	121	#438	#358		#406	428	#882	126	#465	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		644	539	335	689		387	1013	852	374	958	
Starvation Cap Reductn		52	72	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		1.01	0.66	0.86	0.85		0.82	0.82	1.15	0.26	0.88	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay (s/veh): 68.4

Intersection LOS: E

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

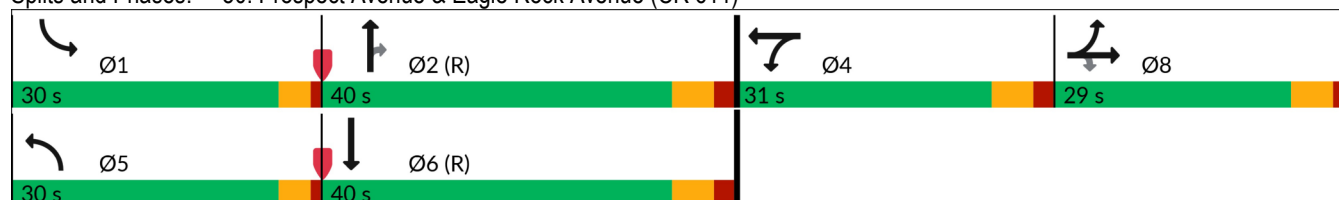
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)



50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	481	300	565	247	45	311	811	961	97	676	148
Future Volume (vph)	105	481	300	565	247	45	311	811	961	97	676	148
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.988				0.850		0.973	
Flt Protected		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (prot)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Flt Permitted		0.991		0.950	0.976		0.950			0.950		
Satd. Flow (perm)	0	3641	1625	1746	3560	0	1938	3876	1734	1871	3612	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			306		6				540		19	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	3%	2%	1%	2%	1%	1%	1%	1%	2%	1%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	598	306	288	587	0	317	828	981	99	841	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	30.0	30.0	30.0	31.0	31.0		29.0	40.0	40.0	29.0	40.0	
Total Split (%)	23.1%	23.1%	23.1%	23.8%	23.8%		22.3%	30.8%	30.8%	22.3%	30.8%	
Maximum Green (s)	24.0	24.0	24.0	25.0	25.0		25.0	34.0	34.0	25.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.8	23.8	25.0	25.0		25.0	34.2	34.2	25.0	34.2	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.19	0.26	0.26	0.19	0.26	
v/c Ratio		0.90	0.56	0.86	0.85		0.85	0.81	1.15	0.28	0.87	
Control Delay (s/veh)		66.7	14.7	75.2	63.1		72.3	52.4	100.7	47.2	55.9	
Queue Delay		11.0	0.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		77.7	15.6	75.2	63.1		72.3	52.4	100.7	47.2	55.9	
LOS		E	B	E	E		E	D	F	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		56.7			67.1			77.6			55.0	
Approach LOS		E			E			E			D	
Queue Length 50th (ft)		246	9	264	264		263	348	~620	73	357	
Queue Length 95th (ft)		#363	121	#438	#358		#419	428	#882	127	#465	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		672	549	335	689		372	1019	854	359	964	
Starvation Cap Reductn		65	77	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.99	0.65	0.86	0.85		0.85	0.81	1.15	0.28	0.87	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay (s/veh): 67.4	Intersection LOS: E
Intersection Capacity Utilization 108.3%	ICU Level of Service G
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

 Ø1 29 s	 Ø2 (R) 40 s	 Ø4 31 s	 Ø8 30 s
 Ø5 29 s	 Ø6 (R) 40 s		

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	265	323	566	289	73	324	828	627	101	868	26
Future Volume (vph)	96	265	323	566	289	73	324	828	627	101	868	26
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.983				0.850		0.996	
Flt Protected		0.987		0.950	0.979		0.950			0.950		
Satd. Flow (prot)	0	3693	1657	1764	3594	0	1919	3876	1734	1890	3693	0
Flt Permitted		0.987		0.950	0.979		0.950			0.950		
Satd. Flow (perm)	0	3693	1657	1764	3594	0	1919	3876	1734	1890	3693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			330		9				345		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%	2%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	368	330	312	635	0	331	845	640	103	913	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	29.0	29.0	29.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	22.3%	22.3%	22.3%	23.8%	23.8%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	23.0	23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		23.0	23.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Actuated g/C Ratio		0.18	0.18	0.19	0.19		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.56	0.59	0.92	0.91		0.86	0.83	0.90	0.27	0.94	
Control Delay (s/veh)		48.8	14.0	84.0	68.8		72.7	53.7	38.6	46.3	65.3	
Queue Delay		0.5	0.8	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		49.3	14.9	84.0	68.8		72.7	53.7	38.6	46.3	65.3	
LOS		D	B	F	E		E	D	D	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		33.0			73.8			51.9			63.4	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)		141	0	289	286		277	358	272	74	404	
Queue Length 95th (ft)		190	115	#483	#400		#440	438	#509	129	#538	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		653	564	339	698		383	1013	708	378	967	
Starvation Cap Reductn		69	71	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.63	0.67	0.92	0.91		0.86	0.83	0.90	0.27	0.94	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 56.2

Intersection LOS: E

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

 Ø1	 Ø2 (R)	 Ø4	 Ø8
30 s	40 s	31 s	29 s
 Ø5	 Ø6 (R)		
30 s	40 s		

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	265	323	566	289	73	324	828	627	101	868	26
Future Volume (vph)	96	265	323	566	289	73	324	828	627	101	868	26
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		6%			-3%			-3%			4%	
Storage Length (ft)	0		0	400		0	0		135	150		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			250			25			70		
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.983				0.850		0.996	
Flt Protected		0.987		0.950	0.979		0.950			0.950		
Satd. Flow (prot)	0	3693	1657	1764	3594	0	1919	3876	1734	1890	3693	0
Flt Permitted		0.987		0.950	0.979		0.950			0.950		
Satd. Flow (perm)	0	3693	1657	1764	3594	0	1919	3876	1734	1890	3693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			330		9				345		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		321			735			593			382	
Travel Time (s)		6.3			14.3			11.6			7.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%	2%	1%	1%	0%	2%	0%
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	368	330	312	635	0	331	845	640	103	913	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	22.0	22.0	22.0	25.0	25.0		26.0	34.0	34.0	26.0	34.0	
Minimum Split (s)	28.0	28.0	28.0	31.0	31.0		30.0	40.0	40.0	30.0	40.0	
Total Split (s)	28.0	28.0	28.0	32.0	32.0		30.0	40.0	40.0	30.0	40.0	
Total Split (%)	21.5%	21.5%	21.5%	24.6%	24.6%		23.1%	30.8%	30.8%	23.1%	30.8%	
Maximum Green (s)	22.0	22.0	22.0	26.0	26.0		26.0	34.0	34.0	26.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.0	3.0	2.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max	C-Max	None	C-Max	
Act Effect Green (s)		22.0	22.0	25.8	25.8		26.0	34.2	34.2	26.0	34.2	
Actuated g/C Ratio		0.17	0.17	0.20	0.20		0.20	0.26	0.26	0.20	0.26	
v/c Ratio		0.59	0.60	0.89	0.88		0.86	0.83	0.90	0.27	0.94	
Control Delay (s/veh)		50.1	14.4	78.5	64.7		72.7	53.3	38.3	46.3	64.3	
Queue Delay		0.4	0.9	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		50.6	15.3	78.5	64.7		72.7	53.3	38.3	46.3	64.3	
LOS		D	B	E	E		E	D	D	D	E	

50: Prospect Avenue & Eagle Rock Avenue (CR 611)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay (s/veh)		33.9			69.2			51.6			62.5	
Approach LOS		C			E			D			E	
Queue Length 50th (ft)		142	0	285	284		277	358	272	74	404	
Queue Length 95th (ft)		191	115	#470	#386		#440	438	#509	129	#538	
Internal Link Dist (ft)		241			655			513			302	
Turn Bay Length (ft)				400					135	150		
Base Capacity (vph)		624	554	352	726		383	1019	710	378	973	
Starvation Cap Reductn		51	68	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.64	0.68	0.89	0.87		0.86	0.83	0.90	0.27	0.94	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay (s/veh): 55.0

Intersection LOS: E

Intersection Capacity Utilization 107.5%

ICU Level of Service G

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 50: Prospect Avenue & Eagle Rock Avenue (CR 611)

 Ø1	 Ø2 (R)	 Ø4	 Ø8
30 s	40 s	32 s	28 s
 Ø5	 Ø6 (R)		
30 s	40 s		

Intersection

Int Delay, s/veh 1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
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Lane Configurations	↑↑			↑↑	↑↑	
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Traffic Vol, veh/h	584	6	24	480	27	22
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Future Vol, veh/h	584	6	24	480	27	22
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Conflicting Peds, #/hr	0	0	0	0	0	0
------------------------	---	---	---	---	---	---

Sign Control	Free	Free	Free	Free	Stop	Stop
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	-	-	-	0	-
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Veh in Median Storage, #	0	-	-	0	0	-
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Grade, %	7	-	-	-6	0	-
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Peak Hour Factor	93	93	93	93	93	93
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Heavy Vehicles, %	3	2	2	5	2	2
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Mvmt Flow	628	6	26	516	29	24
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Major/Minor	Major1	Major2	Minor1
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Conflicting Flow All	0	0	634	0	941	317
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Stage 1	-	-	-	-	631	-
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Stage 2	-	-	-	-	310	-
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Critical Hdwy	-	-	4.14	-	6.84	6.94
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Critical Hdwy Stg 1	-	-	-	-	5.84	-
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Critical Hdwy Stg 2	-	-	-	-	5.84	-
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Follow-up Hdwy	-	-	2.22	-	3.52	3.32
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Pot Cap-1 Maneuver	-	-	945	-	262	679
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Stage 1	-	-	-	-	492	-
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Stage 2	-	-	-	-	717	-
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Platoon blocked, %	-	-	-	-	-	-
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Mov Cap-1 Maneuver	-	-	945	-	253	679
--------------------	---	---	-----	---	-----	-----

Mov Cap-2 Maneuver	-	-	-	-	253	-
--------------------	---	---	---	---	-----	---

Stage 1	-	-	-	-	492	-
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Stage 2	-	-	-	-	694	-
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Approach	EB	WB	NB
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HCM Ctrl Dly, s/v	0	0.67	16.99
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HCM LOS			C
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Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
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Capacity (veh/h)	353	-	-	171	-
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HCM Lane V/C Ratio	0.149	-	-	0.027	-
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HCM Ctrl Dly (s/v)	17	-	-	8.9	0.3
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HCM Lane LOS	C	-	-	A	A
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HCM 95th %tile Q(veh)	0.5	-	-	0.1	-
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Intersection

Int Delay, s/veh 0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑↑	
Traffic Vol, veh/h	651	6	24	526	25	20
Future Vol, veh/h	651	6	24	526	25	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	7	-	-	-6	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	1	2	2
Mvmt Flow	685	6	25	554	26	21

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	692	0	1016
Stage 1	-	-	-	-	688
Stage 2	-	-	-	-	327
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	899	-	234
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	703
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	899	-	226
Mov Cap-2 Maneuver	-	-	-	-	226
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	679

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.66	18.26
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	319	-	-	157	-
HCM Lane V/C Ratio	0.149	-	-	0.028	-
HCM Ctrl Dly (s/v)	18.3	-	-	9.1	0.3
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Intersection

Int Delay, s/veh 1.5

Movement EBT EBR WBL WBT NBL NBRLane Configurations      

Traffic Vol, veh/h 600 8 33 510 40 32

Future Vol, veh/h 600 8 33 510 40 32

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, % 7 - - -6 0 -

Peak Hour Factor 97 97 97 97 97 97

Heavy Vehicles, % 0 2 2 0 2 2

Mvmt Flow 619 8 34 526 41 33

Major/Minor Major1 Major2 Minor1

Conflicting Flow All 0 0 627 0 954 313

Stage 1 - - - - 623 -

Stage 2 - - - - 331 -

Critical Hdwy - - 4.14 - 6.84 6.94

Critical Hdwy Stg 1 - - - - 5.84 -

Critical Hdwy Stg 2 - - - - 5.84 -

Follow-up Hdwy - - 2.22 - 3.52 3.32

Pot Cap-1 Maneuver - - 951 - 257 682

Stage 1 - - - - 497 -

Stage 2 - - - - 700 -

Platoon blocked, % - - - -

Mov Cap-1 Maneuver - - 951 - 246 682

Mov Cap-2 Maneuver - - - - 246 -

Stage 1 - - - - 497 -

Stage 2 - - - - 670 -

Approach EB WB NB

HCM Ctrl Dly, s/v 0 0.85 18.33

HCM LOS C

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h) 344 - - 219 -

HCM Lane V/C Ratio 0.216 - - 0.036 -

HCM Ctrl Dly (s/v) 18.3 - - 8.9 0.3

HCM Lane LOS C - - A A

HCM 95th %tile Q(veh) 0.8 - - 0.1 -

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	585	24	6	501	0	5
Future Vol, veh/h	585	24	6	501	0	5
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, %	7	-	-	-6	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	2	2	5	2	2
Mvmt Flow	629	26	6	539	0	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	655
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	-
Pot Cap-1 Maneuver	-	928	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	928	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.18	10.43
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	668	-	-	43	-
HCM Lane V/C Ratio	0.008	-	-	0.007	-
HCM Ctrl Dly (s/v)	10.4	-	-	8.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	652	24	7	544	0	5
Future Vol, veh/h	652	24	7	544	0	5
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, %	7	-	-	-6	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	1	2	2
Mvmt Flow	686	25	7	573	0	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	712
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	-
Pot Cap-1 Maneuver	-	884	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	884	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.2	10.67
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	641	-	-	46	-
HCM Lane V/C Ratio	0.008	-	-	0.008	-
HCM Ctrl Dly (s/v)	10.7	-	-	9.1	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	600	33	9	541	0	8
Future Vol, veh/h	600	33	9	541	0	8
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, %	7	-	-	-6	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	619	34	9	558	0	8

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	653
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	-
Pot Cap-1 Maneuver	-	930	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	930	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.25	10.44
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	669	-	-	59	-
HCM Lane V/C Ratio	0.012	-	-	0.01	-
HCM Ctrl Dly (s/v)	10.4	-	-	8.9	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Appendix D

Popeye's Operational Data



Location: Popeye's - 372 Central Ave
Municipality: East Orange
State: NJ

Date: 11/13/2025
Enumerator:
Job #: 1021-99-025T

Weekend Count - Noon					
Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
12:00 PM	4	3	7	5	12
12:15 PM	5	2	3	3	9
12:30 PM	4	2	6	2	7
12:45 PM	5	2	6	5	10
1:00 PM	5	4	10	7	8
1:15 PM	9	3	6	3	14
1:30 PM	6	1	4	8	13
1:45 PM	7	2	4	4	12

Weekend Count - PM					
Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
4:30 PM	7	2	6	7	11
4:45 PM	8	1	2	5	11
5:00 PM	9	5	10	3	9
5:15 PM	8	3	4	5	9
5:30 PM	10	2	4	5	15
5:45 PM	6	2	8	3	9
6:00 PM	5	2	7	10	16
6:15 PM	6	5	9	7	14
6:30 PM	7	3	5	9	11
6:45 PM	11	5	4	12	15



Location: Popeyes Louisiana Kitchen, 372 Central Ave
Municipality: East Orange
State: NJ

Date: 11/8/2025
Enumerator: _____
Job #: 1021-99-025T

Weekend Count - Noon					
Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
12:00 PM	6	5	7	6	6
12:15 PM	7	5	4	7	12
12:30 PM	7	5	4	5	10
12:45 PM	6	3	3	4	12
1:00 PM	5	1	2	3	5
1:15 PM	6	1	4	5	9
1:30 PM	4	2	8	5	3
1:45 PM	8	4	4	2	11
2:00 PM	6	2	5	4	12
2:15 PM	5	4	8	5	13
2:30 PM	5	3	6	4	9
2:45 PM	5	2	6	8	13



Location: Popeye's - 929 S Orange Avenue
Municipality: East Orange
State: NJ

Date: 11/13/2025
Enumerator:
Job #: 1021-99-025T

Weekend Count - Noon

Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
12:00 PM	4	2	6	4	9
12:15 PM	3	4	8	3	8
12:30 PM	3	4	5	6	13
12:45 PM	7	2	1	3	10
1:00 PM	3	3	5	4	16
1:15 PM	1	1	2	0	5
1:30 PM	1	2	4	5	4
1:45 PM	5	2	4	3	9

Weekend Count - PM

Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
4:30 PM	4	2	2	2	10
4:45 PM	2	4	4	3	8
5:00 PM	3	3	6	3	13
5:15 PM	5	2	4	4	8
5:30 PM	4	1	1	3	7
5:45 PM	4	3	7	4	8
6:00 PM	3	4	7	2	20
6:15 PM	0	3	11	4	12
6:30 PM	3	4	6	5	14
6:45 PM	3	2	4	5	10



Location: Popeyes Louisiana Kitchen, 929 S Orange Ave
Municipality: East Orange
State: NJ

Date: 11/8/2025
Enumerator: _____
Job #: 1021-99-025T

Weekend Count - Noon

Interval	Parking Count (# of occupied spaces)	Maximum Queue at drive-thru	Entering vehicles from any driveway - drive-thru vs parking		Vehicles Exiting All Driveways
			Drive-thru	Parking	
12:00 PM	1	1	3	0	3
12:15 PM	1	1	0	2	1
12:30 PM	3	1	3	1	8
12:45 PM	2	1	1	2	4
1:00 PM	2	1	1	3	3
1:15 PM	3	1	2	5	9
1:30 PM	4	2	5	0	8
1:45 PM	2	2	6	1	7
2:00 PM	4	2	4	4	5
2:15 PM	9	2	4	3	12
2:30 PM	5	2	4	3	14
2:45 PM	4	3	7	1	12