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August 12, 2022
Via Email

William Pasik
Brookfield Properties
1 Meadowlands Plaza
Suite 301
East Rutherford, NJ 07073

RE: Construction Traffic Impact Letter Report
Proposed Industrial Park
Old Mill Road & Hemion Road (CR 93)
Section 55.22 Block 1, Lot 1
Village of Suffern, Rockland County, NY
DT#: 3709-99-004T

Dear Mr. Pasik:

Dynamic Traffic has prepared the following assessment to determine the traffic impact of construction vehicles associated with the redevelopment of the former Novartis pharmaceutical complex, located along Hemion Road (CR 93) north of Lafayette Avenue (NYS Route 59) in the Village of Suffern, Rockland County, New York (see Figure 1). The site is designated as Section 55.22 Block 1 - Lot 1 on the Village Tax Maps. It is proposed to demolish the existing complex and construct an industrial park with three (3) warehouse buildings totaling 1,221,800 SF, with Building 1 consisting of 963,100 SF, Building 2 consisting of 170,500 SF and Building 3 consisting of 88,200 SF ("The Project"). Access to the site is currently provided via a full movement driveway at the southern end of the site along Hemion Road (CR 93) and a full movement driveway at the northern end of the site along Old Mill Road, which ultimately connects to Hemion Road (CR 93). It is proposed to close the existing access points along Old Mill Road and reconstruct the existing access point along Hemion Road (CR 93) with trucks restricted to left-in/right-in/right-out movements.

Dynamic Traffic LLC has been retained to prepare this study to assess the traffic impact associated with construction vehicles during the construction of The Project on the adjacent roadway network.

Existing Conditions

Lafayette Avenue (NYS Route 59) is an Urban Principal Arterial roadway under NYSDOT jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided intermittently along both sides of the roadway. Lafayette Avenue provides a slightly curved horizontal alignment west of Hemion Road with a downgrade from east to west. The land uses along Lafayette Avenue in the vicinity of The Project are mixed commercial and residential.

Hemion Road (CR 93) is an Urban Major Collector roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are only provided intermittently near the intersection of Campbell Avenue/Hemion Road and Lafayette Avenue (NYS Route 59). Hemion Road provides a curved horizontal alignment with an upgrade from north to south. The land uses along Hemion Road in the vicinity of The Project are primarily industrial.

Airmont Road (CR 89) is an Urban Minor Arterial roadway under Rockland County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides two travel lanes in each direction north of Lafayette Avenue (NYS Route 59) and one travel lane in each direction south of Lafayette Avenue (NYS Route 59). On-street parking is not provided along either side of the roadway. Curb and sidewalk are provided along both sides of the roadway. Airmont Road provides a curved horizontal alignment and a rolling vertical alignment. The land uses along Airmont Road in the vicinity of The Project are primarily commercial.

Campbell Avenue is an Urban Minor Arterial roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one travel lane in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the northbound side of the roadway. Campbell Avenue provides a curved horizontal alignment with a downgrade from north to south. The land uses along Campbell Avenue in the vicinity of The Project are primarily residential.

North DeBaun Avenue is a local roadway under private jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is not posted and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb is provided along both sides of the roadway, while sidewalk is provided along the westbound side of the roadway. North DeBaun Avenue provides a straight horizontal alignment and a flat vertical alignment. The land uses along North DeBaun Avenue are a mix of commercial, office, and lodging.

Brookside Avenue is a local roadway under municipal jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 30 MPH and the roadway provides one lane of travel in each direction. On-street parking is not provided along either side of the roadway. Curb and sidewalk are not provided along either side of the roadway. Brookside Avenue provides a straight horizontal alignment with an upgrade from north to south. The land uses along Brookside Avenue are primarily residential.

Site Generated Construction Traffic

During the construction of The Project, there is anticipated to be 300,000 cubic yards (CY) of imported fill per day. Based on construction estimates, this will require 100 trucks a day, which are assumed to arrive to the site spread throughout the ten-hour workday, which equates to an average of 10 trucks per hour. In an effort to remain conservative, 20 trucks were assumed to arrive and depart during the peak hour. The following table shows the anticipated construction vehicle trip generation for The Project.

Table I
Construction Vehicle Trip Generation

AM PSH			PM PSH		
In	**Out**	**Total**	**In**	**Out**	**Total**
20	20	40	20	20	40

As can be seen above, the proposed site is projected to conservatively generate 40 construction vehicle trips during the weekday morning and weekday evening peak hours during construction. It should be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour." Hence, it is not anticipated that the roadway construction will result in a significant degradation of operating conditions.

Trip Distribution

Once the magnitude of the site generated construction traffic is known, it is necessary to assign the traffic to the adjacent street system. The distribution of the construction site traffic is based upon the location of local quarries. The closest two quarries are located in West Nyack, NY to the east of the site, therefore all trips were assumed to travel to the site via I-287/I-87 Westbound and travel from the site via I-287/I-87 Eastbound. The trips were then routed to/from the site via Airmont Road (CR 89) and Lafayette Avenue (NYS Route 59) due to the weight restriction along Montebello Road (CR 64).

Future Traffic Volumes

Existing and Future traffic volumes were obtained from the *Traffic Impact Study* prepared by this firm, dated August 11, 2022. The Future No-Build Volumes are shown on Figure 2. The Construction Traffic Distribution and Construction Site-Generated Trips are shown on Figures 3 and 4, respectively. The Construction Site-Generated Trips were added to the Future No-Build volumes to generate the Construction Volumes, which are shown on Figure 5.

Capacity Analysis

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

Table II
Construction Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH				PM PSH			
			No Build		Construction		No Build		Construction	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Lafayette Avenue (NYS Route 59) & Campbell Avenue/ Hemion Road (CR 93)	EB	L	F (115)	1.09	F (115)	1.09	E (75)	0.96	E (76)	0.96
		T	E (80)	1.02	E (80)	1.02	D (37)	0.81	D (37)	0.81
		R	A (1)	0.08	A (1)	0.08	A (1)	0.12	A (1)	0.12
	WB	L	D (44)	0.74	D (44)	0.74	B (17)	0.35	B (17)	0.36
		T	F (100)	1.09	F (100)	1.09	E (74)	1.03	E (75)	1.04
		R	A (1)	0.13	A (3)	0.19	A (1)	0.12	A (2)	0.16
	NB	L	D (38)	0.67	D (38)	0.67	D (38)	0.66	D (38)	0.67
		TR	D (44)	0.69	D (44)	0.70	E (68)	0.91	E (69)	0.91
	SB	L	C (31)	0.58	D (42)	0.73	D (41)	0.71	E (57)	0.86
		TR	E (57)	0.89	E (57)	0.89	F (134)	1.16	F (130)	1.15
	Overall		**E (68)**	**1.09**	**E (68)**	**1.09**	**E (62)**	**1.16**	**E (63)**	**1.15**
Lafayette Avenue (NYS Route 59) & Airmont Road (CR 89)	EB	L	F (131)	1.15	F (167)	1.24	F (194)	1.30	F (237)	1.41
		T	D (44)	0.45	D (44)	0.60	D (47)	0.67	D (47)	0.67
		R	A (1)	0.03	A (1)	0.03	A (2)	0.10	A (2)	0.10
	WB	L	D (39)	0.22	D (39)	0.34	D (40)	0.51	D (40)	0.51
		T	E (68)	0.39	E (39)	0.81	E (72)	0.87	E (72)	0.87
		R	D (36)	0.71	D (36)	0.71	D (37)	0.82	D (37)	0.82
	NB	L	C (25)	0.09	E (68)	0.09	D (47)	0.22	D (47)	0.22
		TR	E (57)	0.78	E (57)	0.78	E (61)	0.74	E (61)	0.74
	SB	L	F (172)	1.24	F (172)	1.24	F (105)	1.03	F (105)	1.03
		T	F (86)	0.42	F (86)	0.90	F (96)	1.01	F (96)	1.01
		R	A (6)	0.60	A (7)	0.64	B (14)	0.72	B (16)	0.76
	Overall		**E (74)**	**1.24**	**E (79)**	**1.24**	**E (74)**	**1.30**	**E (80)**	**1.41**
Airmont Road (CR 89) & I-87 SB/I-287 EB Ramps	EB	LT	C (21)	0.65	C (21)	0.65	C (25)	0.65	C (25)	0.65
		R	D (44)	0.93	D (44)	0.93	C (34)	0.88	C (34)	0.88
	NB	T	C (27)	0.65	C (27)	0.65	C (20)	0.58	C (20)	0.58
		R	F (282)	1.54	F (319)	1.63	F (133)	1.21	F (161)	1.28
	SB	L	D (37)	0.78	D (37)	0.78	C (32)	0.80	C (32)	0.80
		T	C (23)	0.47	C (23)	0.49	A (9)	0.52	A (9)	0.54
	Overall		**F (82)**	**1.54**	**F (91)**	**1.63**	**D (41)**	**1.21**	**D (47)**	**1.28**
Airmont Road (CR 89) & I-87 NB/I-287 WB Ramps	WB	L	D (42)	0.78	D (46)	0.89	C (34)	0.64	C (35)	0.80
		LT	D (42)	0.78	D (46)	0.89	C (34)	0.65	D (35)	0.81
		R	C (28)	0.72	C (26)	0.77	B (20)	0.64	B (19)	0.73
	NB	L	F (245)	1.46	F (257)	1.49	E (73)	1.05	E (73)	1.05
		T	B (11)	0.54	B (12)	0.55	A (4)	0.37	A (4)	0.37
	SB	T	C (25)	0.69	C (27)	0.35	D (44)	0.87	D (42)	0.89
		R	A (7)	0.51	A (9)	0.35	B (20)	0.63	B (20)	0.63
	Overall		**D (46)**	**1.46**	**D (49)**	**1.49**	**C (31)**	**1.05**	**C (33)**	**1.05**

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

Table II (continued)
Construction Levels of Service and Vehicle-to-Capacity Ratios

Intersection	Direction/ Movement		AM PSH				PM PSH			
			No Build		Construction		No Build		Construction	
			LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c
Airmont Road (CR 89) & North DeBaun Avenue	EB	LTR	C (34)	0.39	C (34)	0.39	C (33)	0.36	C (33)	0.36
	WB	LTR	C (30)	0.14	C (30)	0.14	C (34)	0.45	C (34)	0.45
	NB	L	A (5)	0.10	A (5)	0.10	A (7)	0.12	A (7)	0.12
		TR	A (10)	0.62	B (10)	0.64	B (13)	0.67	B (14)	0.69
	SB	L	A (6)	0.07	A (6)	0.07	A (7)	0.17	A (8)	0.17
		TR	A (10)	0.56	A (10)	0.57	B (11)	0.64	B (12)	0.65
	Overall		**B (11)**	**0.62**	**B (11)**	**0.64**	**B (14)**	**0.67**	**B (14)**	**0.69**
Lafayette Avenue (NYS Route 59) & Brookside Avenue	WB	L	a (10)	0.094	a (10)	0.096	b (12)	0.251	b (12)	0.255
	NB	LR	c (17)	0.347	c (18)	0.356	d (26)	0.467	d (27)	0.479
Hemion Road (CR 93) & Site Driveway	EB	L	-	-	c (17)	0.081	-	-	c (16)	0.064
	NB	LR	-	-	b (11)	0.045	-	-	b (11)	0.037

As seen in Table II above, the overall impacts of construction traffic are anticipated to be minimal. The proposed signal timing modifications at the intersections along the truck route would mitigate the largest impacts to traffic operations at the intersections. It is recommended to conduct the proposed signal timing modifications prior to the beginning of site construction to accommodate the increase in construction traffic.

Conclusion

Based upon our Traffic Impact Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the Village of Suffern, Village of Montebello, Village of Airmont, Rockland County, and NYSDOT will not experience any significant degradation in operating conditions during the construction of the site. Conducting the proposed signal timing modifications prior to the beginning of site construction would mitigate the increase in construction traffic.

If you have any questions on the above, please do not hesitate to contact our office.

Sincerely,

Dynamic Traffic, LLC

Corey Chase, PE
Principal
NY PE License 93631

Kevin Savage, PE, PTOE
Project Manager
NY PE License 105693

JTT
Enclosures

c: Joshua M. Sewald, PE, PP (via email w/enclosure)
Darius Chafizadeh (via email w/ enclosure)
Gina Martini, AICP, ENV SP (via email w/enclosure)
Jim Wyatt, LEED AP BD+C (via email w/enclosure)
Greg Fleischer, PWS (via email w/enclosure)

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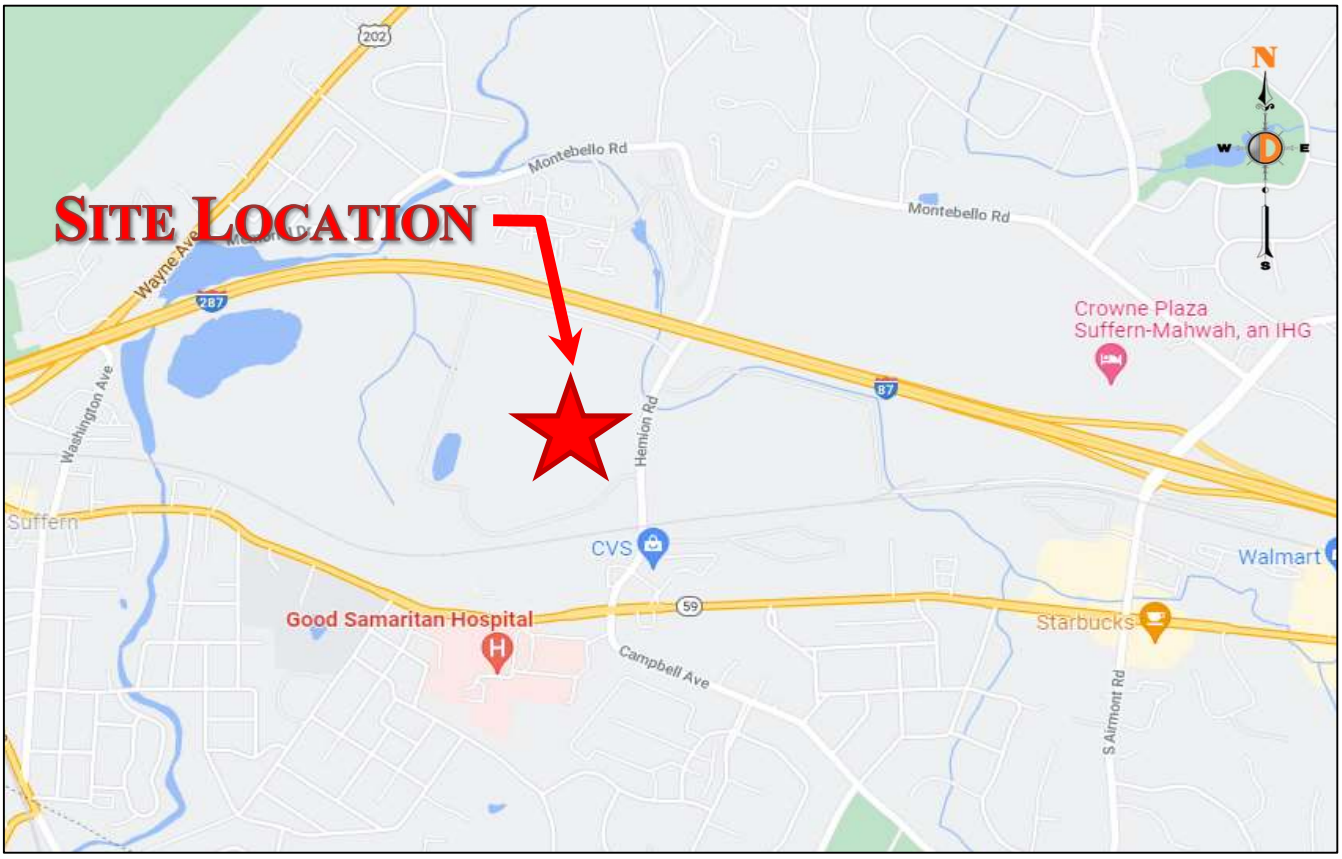

Proposed Industrial Park
Construction Traffic Impact Letter Report
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Figure 1

Site Location Map

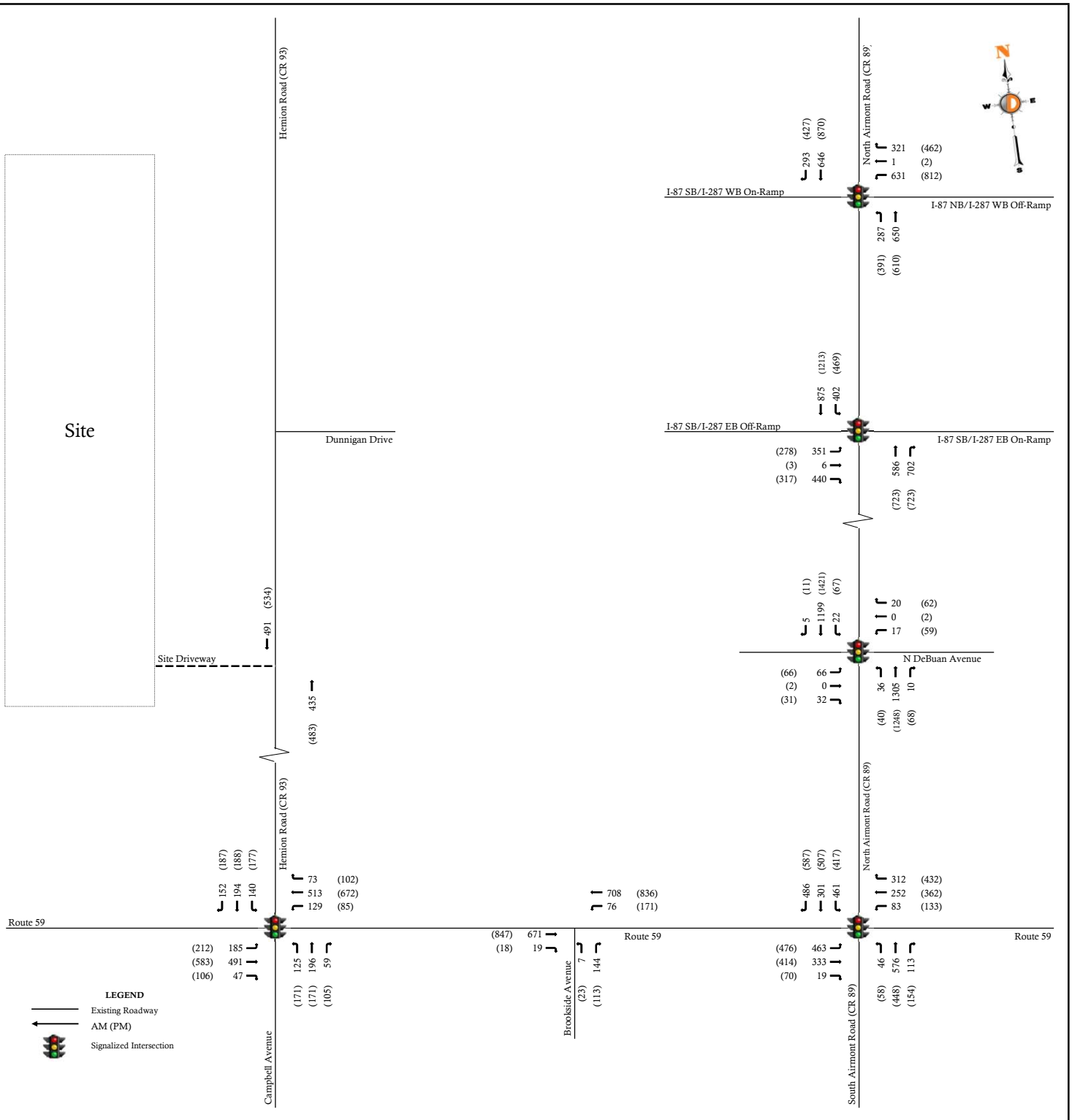

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Figure 2

No Build Traffic Volumes

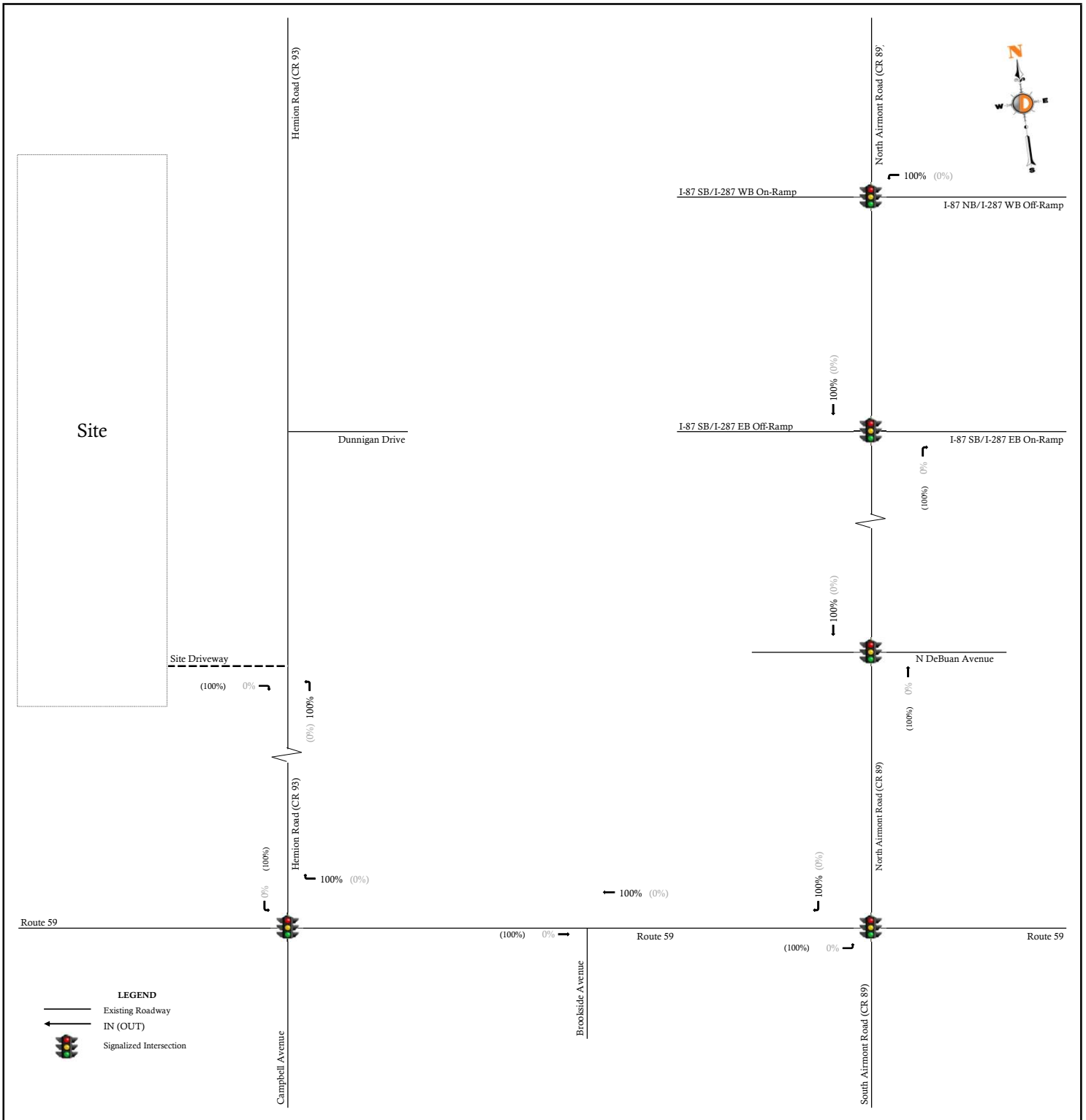

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Figure 3

Percent Distribution (Truck Trips)

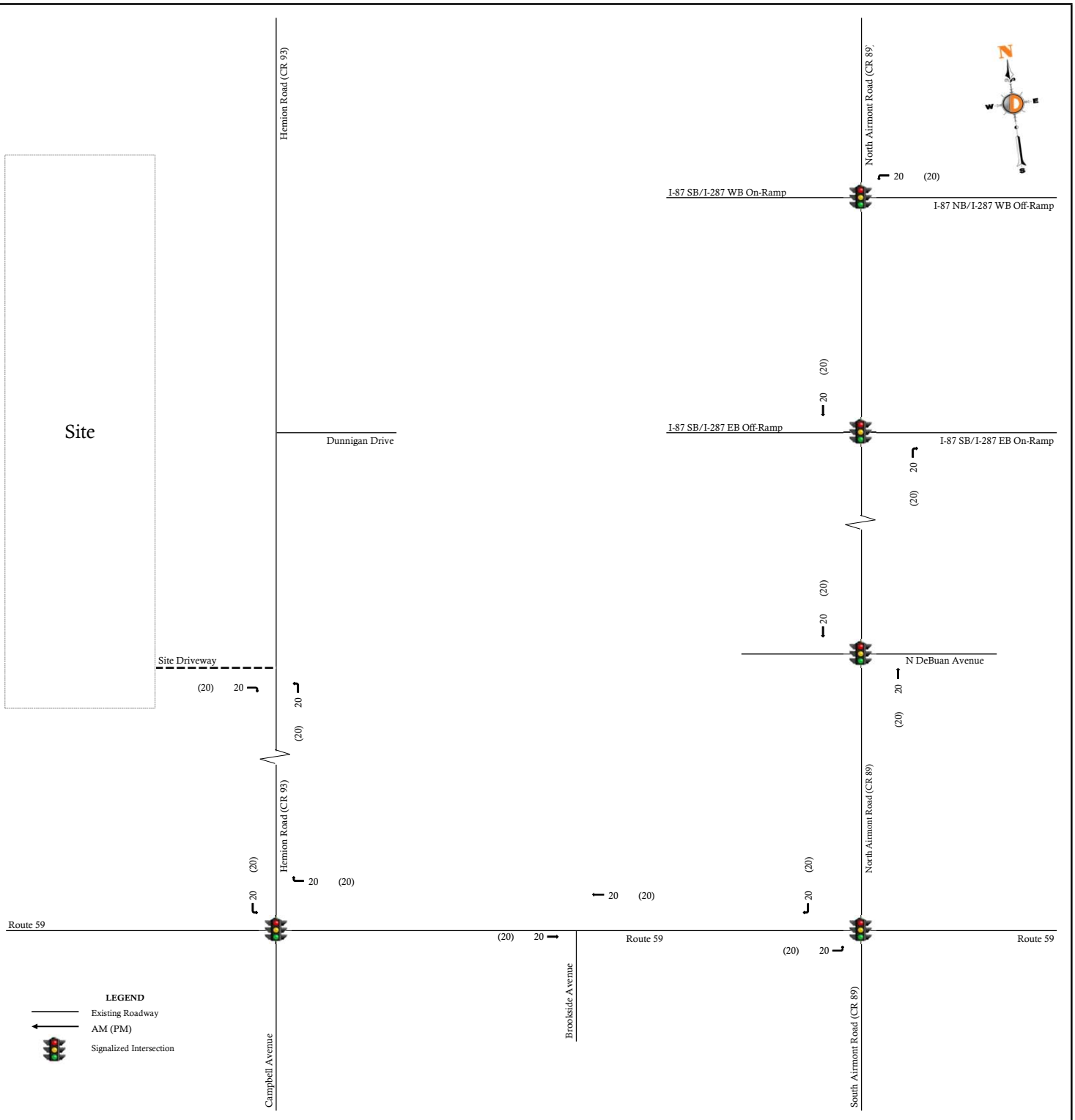

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Figure 4

Truck Site Generated Trips

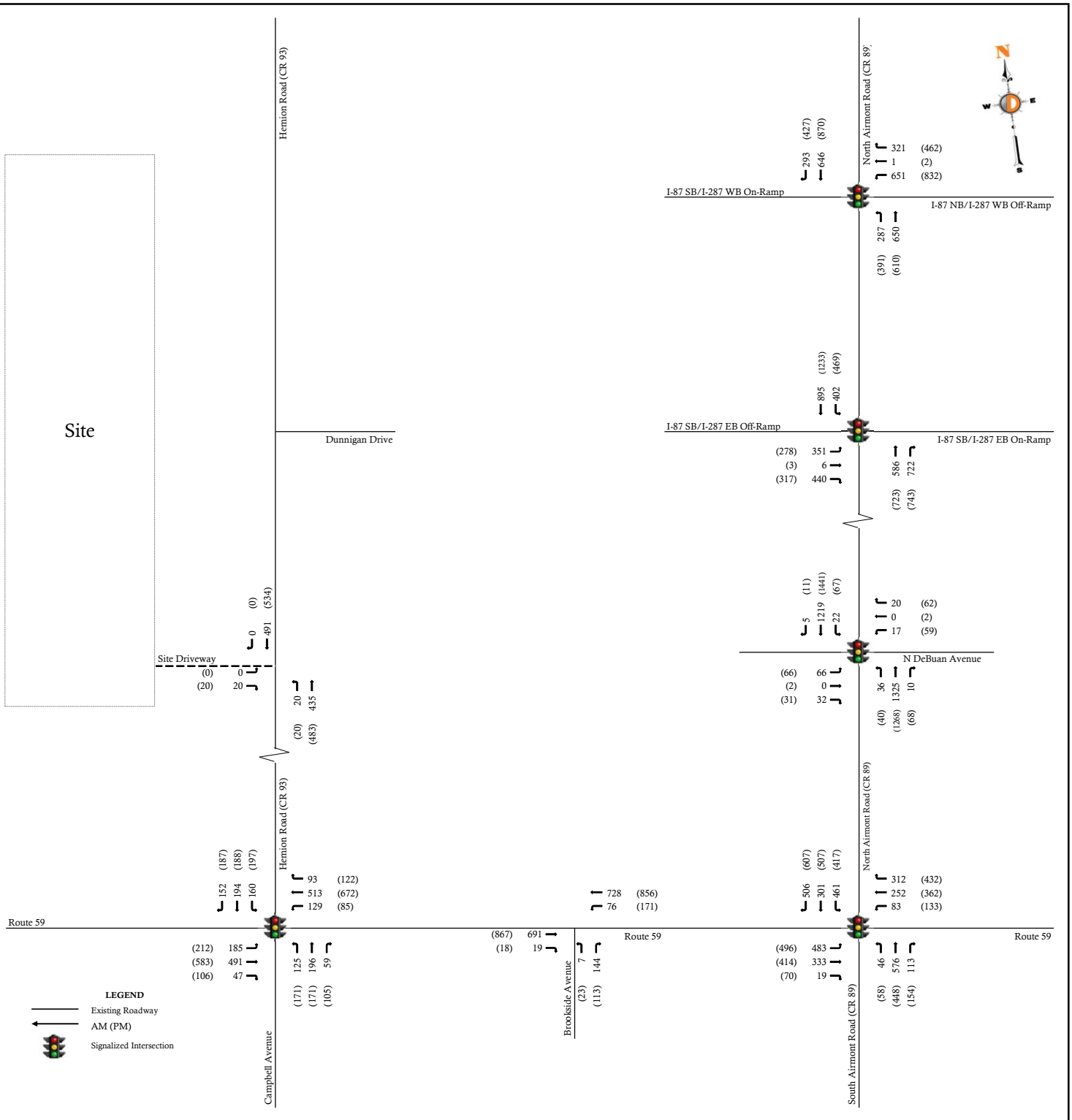

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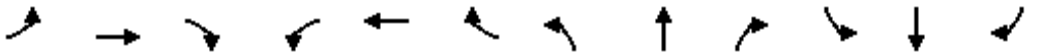
Figure 11

Construction Traffic Volumes



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	491	47	129	513	73	125	196	59	140	194	152
Future Volume (vph)	185	491	47	129	513	73	125	196	59	140	194	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1482	1901	1739	0	1745	1769	0
Flt Permitted	0.115			0.116			0.150			0.326		
Satd. Flow (perm)	203	1749	1432	214	1727	1445	300	1739	0	597	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	9%	6%	5%	11%	9%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	599	57	157	626	89	152	311	0	171	422	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.8	35.7	49.2	43.2	35.4	43.1	35.5	27.0		36.0	27.3	
Actuated g/C Ratio	0.41	0.33	0.46	0.40	0.33	0.40	0.33	0.25		0.34	0.26	

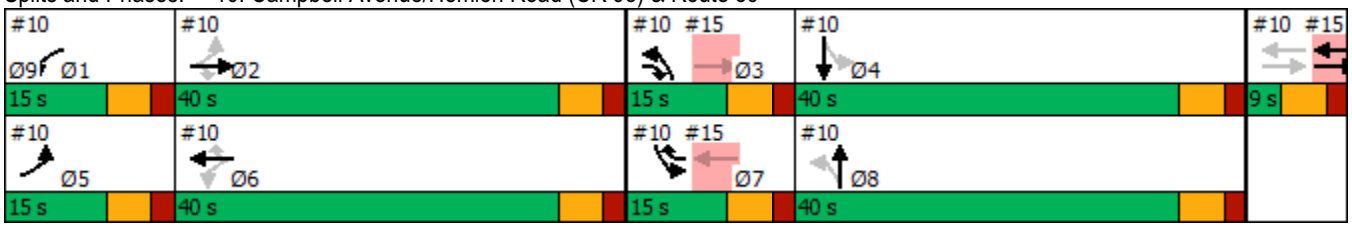
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.09	1.02	0.08	0.74	1.09	0.13	0.67	0.69		0.58	0.89	
Control Delay	114.5	79.8	0.2	43.8	100.4	1.3	37.7	43.5		31.4	56.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	114.5	79.8	0.2	43.8	100.4	1.3	37.7	43.5		31.4	56.8	
LOS	F	E	A	D	F	A	D	D		C	E	
Approach Delay		83.6			80.1			41.6			49.5	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~120	~437	0	59	~479	0	63	176		73	246	
Queue Length 95th (ft)	#282	#580	0	#149	#657	2	108	262		122	354	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	208	585	742	218	573	673	237	568		301	592	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.09	1.02	0.08	0.72	1.09	0.13	0.64	0.55		0.57	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 119
Actuated Cycle Length: 106.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 68.4 Intersection LOS: E
Intersection Capacity Utilization 83.7% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

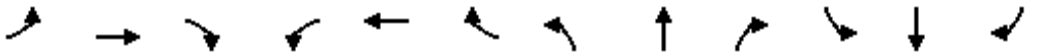
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	463	333	19	83	252	312	46	576	113	461	301	486
Future Volume (vph)	463	333	19	83	252	312	46	576	113	461	301	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1792	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1422
Flt Permitted	0.152			0.556			0.261			0.127		
Satd. Flow (perm)	287	1724	1168	1060	1761	1299	427	3343	0	221	1627	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				416
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
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 (%)	2%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	472	340	19	85	257	318	47	703	0	470	307	496
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	56.5	48.8	81.9	29.7	27.0	51.5	73.0	40.1		61.5	31.4	61.5
Actuated g/C Ratio	0.38	0.33	0.55	0.20	0.18	0.34	0.49	0.27		0.41	0.21	0.41
v/c Ratio	1.15	0.60	0.03	0.34	0.81	0.71	0.09	0.78		1.24	0.90	0.60
Control Delay	131.1	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	6.1

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	131.1	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	6.1
LOS	F	D	A	D	E	D	C	E		F	F	A
Approach Delay		92.4			48.6			55.3			86.6	
Approach LOS		F			D			E			F	
Queue Length 50th (ft)	~449	270	0	49	238	129	22	322		~510	293	27
Queue Length 95th (ft)	#801	319	0	105	234	230	54	452		#793	409	81
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	412	760	685	395	658	447	501	906		380	732	830
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.15	0.45	0.03	0.22	0.39	0.71	0.09	0.78		1.24	0.42	0.60

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 149.3

Natural Cycle: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 74.1 Intersection LOS: E

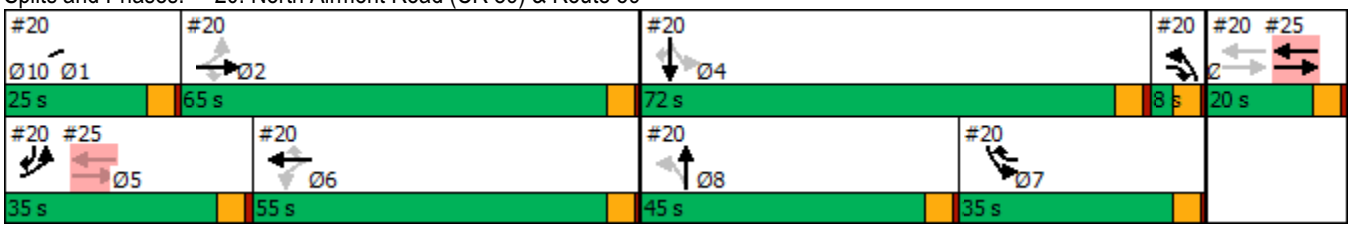
Intersection Capacity Utilization 100.6% ICU Level of Service G

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.

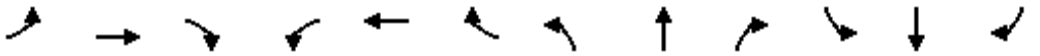
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

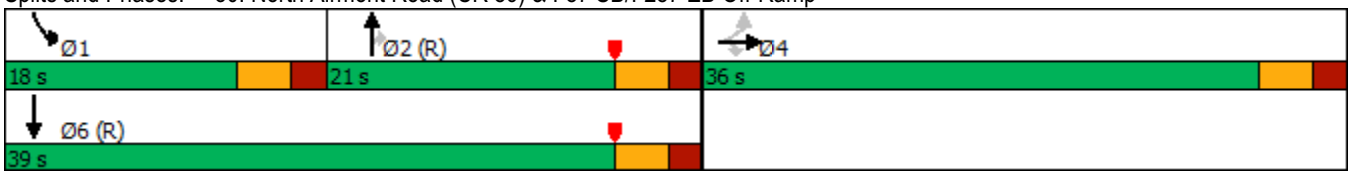


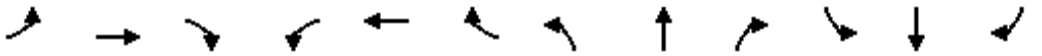
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	6	440	0	0	0	0	586	702	402	875	0
Future Volume (vph)	351	6	440	0	0	0	0	586	702	402	875	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1632	3519	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						582			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	4%	2%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	444	0	0	0	0	592	709	406	884	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	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)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		24.5	24.5					23.4	23.4	12.1	40.5	
Actuated g/C Ratio		0.33	0.33					0.31	0.31	0.16	0.54	
v/c Ratio		0.71	0.87					0.62	0.78	0.71	0.47	
Control Delay		29.2	35.3					23.0	15.4	32.0	9.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		29.2	35.3					23.0	15.4	32.0	9.0	
LOS		C	D					C	B	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6						18.9			16.3	
Approach LOS		C						B			B	
Queue Length 50th (ft)		140	145					130	132	68	50	
Queue Length 95th (ft)		206	241					#229	#245	m116	176	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					948	909	609	1885	
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		0.56	0.72					0.62	0.78	0.67	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	6	440	0	0	0	0	586	702	402	875	0
Future Volume (veh/h)	351	6	440	0	0	0	0	586	702	402	875	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1859	2067	2007	0
Adj Flow Rate, veh/h	355	6	444				0	592	709	406	884	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	4	2	6	0
Cap, veh/h	543	9	477				0	917	459	522	1887	0
Arrive On Green	0.37	0.37	0.37				0.00	0.29	0.29	0.05	0.16	0.00
Sat Flow, veh/h	1462	25	1284				0	3226	1576	3818	3913	0
Grp Volume(v), veh/h	361	0	444				0	592	709	406	884	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1576	1909	1906	0
Q Serve(g_s), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	15.8	0.0
Cycle Q Clear(g_c), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	15.8	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	477				0	917	459	522	1887	0
V/C Ratio(X)	0.65	0.00	0.93				0.00	0.65	1.54	0.78	0.47	0.00
Avail Cap(c_a), veh/h	615	0	531				0	917	459	662	1887	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.58	0.58	0.00
Uniform Delay (d), s/veh	19.6	0.0	22.6				0.0	23.2	26.6	34.7	22.4	0.0
Incr Delay (d2), s/veh	1.5	0.0	21.0				0.0	3.5	255.1	2.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	14.8				0.0	8.4	62.7	6.5	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	43.6				0.0	26.7	281.7	36.7	22.9	0.0
LnGrp LOS	C	A	D				A	C	F	D	C	A
Approach Vol, veh/h		805						1301			1290	
Approach Delay, s/veh		33.5						165.7			27.2	
Approach LOS		C						F			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.3	26.9		32.9		42.1						
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0						
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0						
Max Q Clear Time (g_c+I1), s	9.9	0.0		26.9		0.0						
Green Ext Time (p_c), s	0.4	0.0		1.0		0.0						

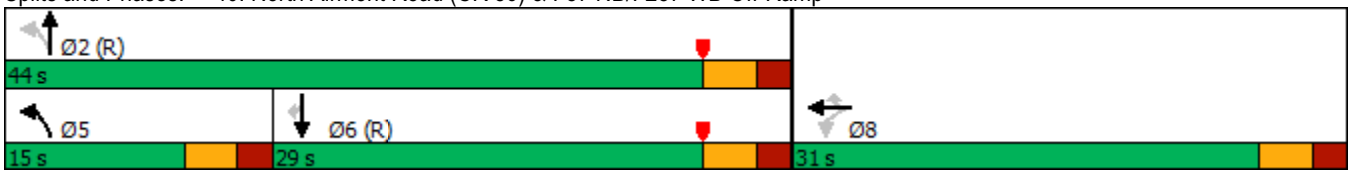
Intersection Summary												
HCM 6th Ctrl Delay			81.8									
HCM 6th LOS			F									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	631	1	321	287	650	0	0	646	293
Future Volume (vph)	0	0	0	631	1	321	287	650	0	0	646	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1603	1606	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.149					
Satd. Flow (perm)	0	0	0	1603	1606	1553	212	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113						401
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	7%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	432	433	440	393	890	0	0	885	401
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				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)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.5	23.5	23.5	41.5	41.5			26.5	26.5
Actuated g/C Ratio				0.31	0.31	0.31	0.55	0.55			0.35	0.35
v/c Ratio				0.86	0.86	0.78	1.46	0.54			0.69	0.51
Control Delay				42.2	42.3	27.5	244.9	11.4			24.8	7.3
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

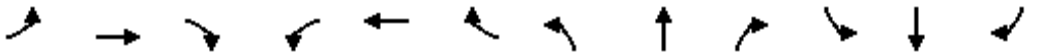
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				42.2	42.3	27.5	244.9	11.4			24.8	7.3
LOS				D	D	C	F	B			C	A
Approach Delay					37.3			82.9			19.3	
Approach LOS					D			F			B	
Queue Length 50th (ft)				186	186	130	~226	150			132	9
Queue Length 95th (ft)				221	221	161	#287	152			218	64
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				555	556	612	269	1648			1281	789
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				0.78	0.78	0.72	1.46	0.54			0.69	0.51

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.46			
Intersection Signal Delay: 46.4		Intersection LOS: D	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	0	32	17	0	20	36	1305	10	22	1199	5
Future Volume (vph)	66	0	32	17	0	20	36	1305	10	22	1199	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.928			0.999			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1725	0	0	1676	0	1574	3321	0	1718	3290	0
Flt Permitted		0.774			0.880		0.140			0.131		
Satd. Flow (perm)	0	1379	0	0	1509	0	232	3321	0	237	3290	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		5.0			12.6			4.2			3.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	5%	0%	0%	8%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	41	0	40	1461	0	24	1338	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.5			11.5		56.7	53.5		55.9	50.7	
Actuated g/C Ratio		0.15			0.15		0.76	0.71		0.75	0.68	
v/c Ratio		0.40			0.14		0.11	0.62		0.06	0.60	
Control Delay		16.3			3.8		3.9	11.2		3.0	8.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.3			3.8		3.9	11.2		3.0	8.5	
LOS		B			A		A	B		A	A	
Approach Delay		16.3			3.8			11.0			8.4	
Approach LOS		B			A			B			A	
Queue Length 50th (ft)		15			0		4	117		2	175	
Queue Length 95th (ft)		55			11		13	#415		m5	213	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			455		373	2368		395	2223	
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		0.26			0.09		0.11	0.62		0.06	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 9.9 Intersection LOS: A

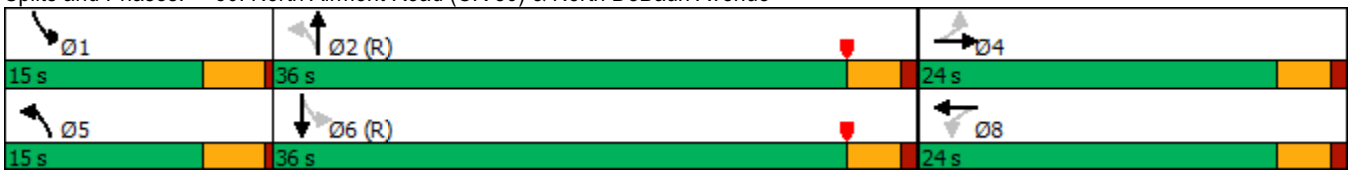
Intersection Capacity Utilization 51.5% ICU Level of Service A

Analysis Period (min) 15

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

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

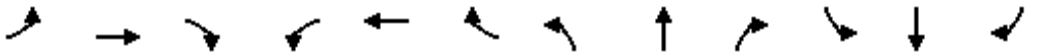
Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	32	17	0	20	36	1305	10	22	1199	5
Future Volume (veh/h)	66	0	32	17	0	20	36	1305	10	22	1199	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1826	1900	2057	1937	1682
Adj Flow Rate, veh/h	73	0	36	19	0	22	40	1450	11	24	1332	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	5	0	0	8	25
Cap, veh/h	199	16	67	147	24	117	397	2329	18	368	2394	11
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.05	0.64	0.64
Sat Flow, veh/h	934	128	524	601	192	918	1711	3529	27	1959	3758	17
Grp Volume(v), veh/h	109	0	0	41	0	0	40	712	749	24	652	686
Grp Sat Flow(s),veh/h/ln	1586	0	0	1712	0	0	1711	1735	1821	1959	1840	1934
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.5	17.8	17.8	0.3	14.9	14.9
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.5	0.0	0.0	0.5	17.8	17.8	0.3	14.9	14.9
Prop In Lane	0.67		0.33	0.46		0.54	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	282	0	0	288	0	0	397	1145	1202	368	1173	1232
V/C Ratio(X)	0.39	0.00	0.00	0.14	0.00	0.00	0.10	0.62	0.62	0.07	0.56	0.56
Avail Cap(c_a), veh/h	495	0	0	506	0	0	519	1145	1202	552	1173	1232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	4.8	7.4	7.4	5.5	7.6	7.6
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.8	0.0	0.0	0.4	2.6	2.4	0.3	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	0.0	0.0	1.3	0.0	0.0	0.3	9.9	10.2	0.2	9.1	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	0.0	30.0	0.0	0.0	5.2	9.9	9.8	5.8	9.6	9.5
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		109			41			1501			1362	
Approach Delay, s/veh		33.6			30.0			9.7			9.4	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	53.5		13.6	9.7	51.8		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	19.8		6.6	2.5	16.9		3.5				
Green Ext Time (p_c), s	0.0	11.0		0.9	0.1	12.8		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		10.7	
HCM 6th LOS		B	

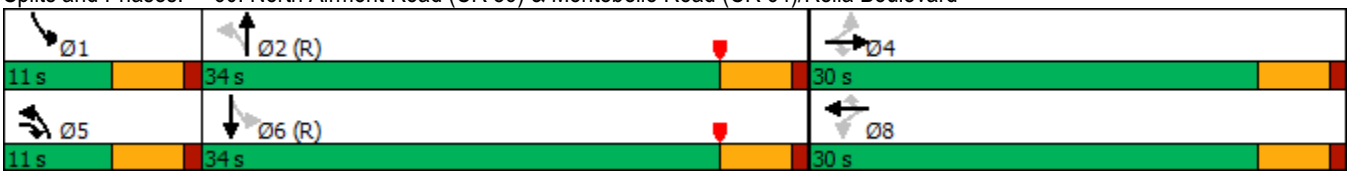


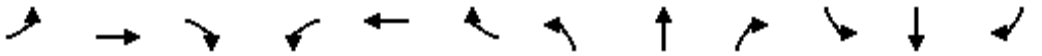
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	24	360	14	6	13	186	546	79	33	652	90
Future Volume (vph)	99	24	360	14	6	13	186	546	79	33	652	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.981			0.982	
Flt Protected		0.961		0.950			0.950			0.950		
Satd. Flow (prot)	0	1727	1433	1797	913	1242	1645	3224	0	1762	3448	0
Flt Permitted		0.764		0.655			0.246			0.387		
Satd. Flow (perm)	0	1373	1433	1239	913	1242	426	3224	0	718	3448	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91			102		25			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			781			587	
Travel Time (s)		15.5			12.2			17.8			13.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	9%	2%	0%	100%	25%	5%	10%	0%	8%	8%	11%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	137	400	16	7	14	207	695	0	37	824	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		13.4	26.5	13.4	13.4	13.4	54.3	48.6		44.7	38.5	
Actuated g/C Ratio		0.18	0.35	0.18	0.18	0.18	0.72	0.65		0.60	0.51	
v/c Ratio		0.56	0.71	0.07	0.04	0.05	0.42	0.33		0.07	0.46	
Control Delay		36.4	21.8	24.2	23.8	0.3	8.1	5.0		5.7	14.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		36.4	21.8	24.2	23.8	0.3	8.1	5.0		5.7	14.2	
LOS		D	C	C	C	A	A	A		A	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		25.5			15.1			5.8			13.8	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)		59	118	6	3	0	17	48		4	120	
Queue Length 95th (ft)		104	173	21	12	0	m53	83		16	211	
Internal Link Dist (ft)		602			368			701			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		457	566	413	304	482	488	2098		517	1779	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.30	0.71	0.04	0.02	0.03	0.42	0.33		0.07	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 55 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 64.0%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	24	360	14	6	13	186	546	79	33	652	90
Future Volume (veh/h)	99	24	360	14	6	13	186	546	79	33	652	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1555	1658	2136	635	1761	1802	1728	1876	2015	2015	1892
Adj Flow Rate, veh/h	110	27	400	16	7	14	207	607	88	37	724	100
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	9	2	0	100	25	5	10	0	8	8	11
Cap, veh/h	365	78	519	573	184	432	410	1367	198	512	1455	201
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.16	0.95	0.95	0.04	0.43	0.43
Sat Flow, veh/h	961	271	1405	1580	635	1492	1717	2879	416	1919	3378	466
Grp Volume(v), veh/h	137	0	400	16	7	14	207	346	349	37	410	414
Grp Sat Flow(s),veh/h/ln	1232	0	1405	1580	635	1492	1717	1642	1653	1919	1914	1931
Q Serve(g_s), s	6.1	0.0	18.8	0.0	0.6	0.5	5.3	1.4	1.4	0.8	11.6	11.7
Cycle Q Clear(g_c), s	6.6	0.0	18.8	0.5	0.6	0.5	5.3	1.4	1.4	0.8	11.6	11.7
Prop In Lane	0.80		1.00	1.00		1.00	1.00		0.25	1.00		0.24
Lane Grp Cap(c), veh/h	443	0	519	573	184	432	410	780	785	512	824	831
V/C Ratio(X)	0.31	0.00	0.77	0.03	0.04	0.03	0.51	0.44	0.45	0.07	0.50	0.50
Avail Cap(c_a), veh/h	497	0	581	643	212	497	410	780	785	597	824	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	20.8	19.1	19.1	19.1	10.5	1.0	1.0	10.9	15.5	15.5
Incr Delay (d2), s/veh	0.4	0.0	5.6	0.0	0.1	0.0	0.8	1.4	1.4	0.1	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.0	10.9	0.4	0.2	0.3	2.9	1.0	1.0	0.6	8.9	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	26.5	19.1	19.2	19.1	11.2	2.4	2.4	10.9	17.6	17.6
LnGrp LOS	C	A	C	B	B	B	B	A	A	B	B	B
Approach Vol, veh/h		537			37			902			861	
Approach Delay, s/veh		25.3			19.2			4.4			17.3	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	40.6		26.7	11.0	37.3		26.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	3.4		20.8	7.3	13.7		2.6				
Green Ext Time (p_c), s	0.0	2.5		0.9	0.0	2.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		14.2	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	10	419	16	10	483
Future Vol, veh/h	8	10	419	16	10	483
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	63	63	63	63	63	63
Heavy Vehicles, %	0	0	8	0	0	7
Mvmt Flow	13	16	665	25	16	767

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1477	678	0	0	690	0
Stage 1	678	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	270	530	-	-	914	-
Stage 1	687	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	530	-	-	914	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	364	914	-
HCM Lane V/C Ratio	-	-	0.078	0.017	-
HCM Control Delay (s)	-	-	15.7	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	671	19	76	708	7	144
Future Vol, veh/h	671	19	76	708	7	144
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	6	6	11	7	17	3
Mvmt Flow	699	20	79	738	7	150

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	719	0	1605	709
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	896	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	842	-	152	468
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	458	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	842	-	138	468
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	415	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	453	-	-	842	-
HCM Lane V/C Ratio	0.347	-	-	0.094	-
HCM Control Delay (s)	17.1	-	-	9.7	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0.3	-

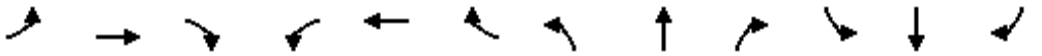
Intersection	
Int Delay, s/veh	22.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	142	196	234	72	2	85	1	142	2	1	0
Future Vol, veh/h	0	142	196	234	72	2	85	1	142	2	1	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, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	0	5	11	8	7	0	12	0	12	0	0	0
Mvmt Flow	0	197	272	325	100	3	118	1	197	3	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	469	0	0	1085	1086	333	1184	1221	102
Stage 1	-	-	-	-	-	-	333	333	-	752	752	-
Stage 2	-	-	-	-	-	-	752	753	-	432	469	-
Critical Hdwy	4.1	-	-	4.18	-	-	6.42	5.7	5.92	6.7	6.1	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	4.7	-	5.7	5.1	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.608	4	3.408	3.5	4	3.3
Pot Cap-1 Maneuver	1502	-	-	1062	-	-	236	278	712	191	208	964
Stage 1	-	-	-	-	-	-	711	697	-	441	458	-
Stage 2	-	-	-	-	-	-	458	497	-	636	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1502	-	-	1062	-	-	175	188	712	103	140	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	188	-	103	140	-
Stage 1	-	-	-	-	-	-	711	697	-	441	309	-
Stage 2	-	-	-	-	-	-	308	335	-	459	594	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	7.5	76.1	38.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	330	1502	-	-	1062	-	-	113
HCM Lane V/C Ratio	0.96	-	-	-	0.306	-	-	0.037
HCM Control Delay (s)	76.1	0	-	-	9.9	0	-	38.1
HCM Lane LOS	F	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	10.1	0	-	-	1.3	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	583	106	85	672	102	171	171	105	177	188	187
Future Volume (vph)	212	583	106	85	672	102	171	171	105	177	188	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1568	1919	1724	0	1847	1756	0
Flt Permitted	0.103			0.178			0.253			0.252		
Satd. Flow (perm)	178	1766	1516	328	1810	1568	511	1724	0	489	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
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 (%)	6%	4%	3%	3%	5%	3%	5%	5%	4%	3%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	601	109	88	693	105	176	284	0	182	387	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.9	39.2	53.5	41.1	34.7	49.1	24.5	15.8		24.7	15.9	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.52	0.26	0.17		0.26	0.17	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.96	0.81	0.12	0.35	1.03	0.12	0.66	0.91		0.71	1.16	
Control Delay	74.8	36.5	0.9	17.2	74.1	0.7	37.6	68.2		41.1	134.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	74.8	36.5	0.9	17.2	74.1	0.7	37.6	68.2		41.1	134.3	
LOS	E	D	A	B	E	A	D	E		D	F	
Approach Delay		41.3			59.7			56.5			104.5	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	80	302	0	23	~399	0	74	149		77	~258	
Queue Length 95th (ft)	#293	#599	8	66	#789	7	#140	265		#161	#425	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	229	740	941	289	671	903	271	312		261	333	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.96	0.81	0.12	0.30	1.03	0.12	0.65	0.91		0.70	1.16	

Intersection Summary

Area Type: Other

Cycle Length: 99

Actuated Cycle Length: 93.6

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 62.2 Intersection LOS: E

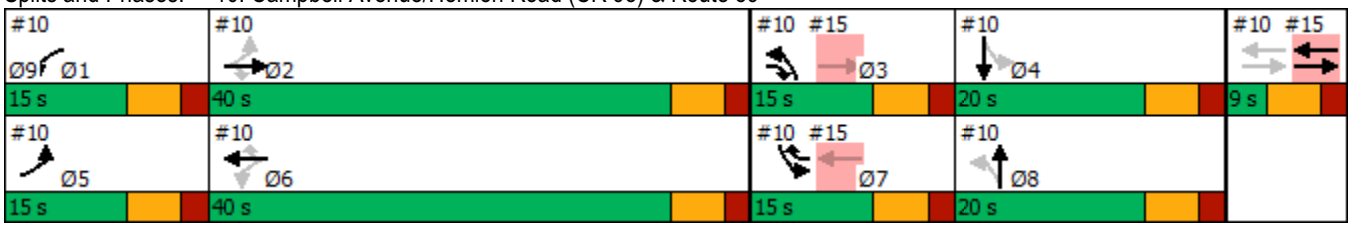
Intersection Capacity Utilization 97.9% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

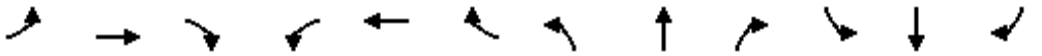
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	476	414	70	133	362	432	58	448	154	417	507	587
Future Volume (vph)	476	414	70	133	362	432	58	448	154	417	507	587
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1758	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1463
Flt Permitted	0.108			0.364			0.100			0.211		
Satd. Flow (perm)	200	1808	1424	700	1828	1398	171	3279	0	378	1739	1463
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					23				258
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
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 (%)	4%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	491	427	72	137	373	445	60	621	0	430	523	605
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	67.3	56.5	73.4	43.4	37.7	62.3	62.4	40.2		71.4	47.9	78.0
Actuated g/C Ratio	0.42	0.35	0.46	0.27	0.24	0.39	0.39	0.25		0.45	0.30	0.49

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.30	0.67	0.10	0.51	0.87	0.82	0.22	0.74		1.03	1.01	0.72
Control Delay	193.7	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.1	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.0
Total Delay	193.7	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.4	13.7
LOS	F	D	A	D	E	D	D	E		F	F	B
Approach Delay		116.3			51.4			59.3			66.8	
Approach LOS		F			D			E			E	
Queue Length 50th (ft)	~575	367	0	81	371	200	33	298		331	~599	151
Queue Length 95th (ft)	#947	404	12	156	342	#376	#116	428		#682	698	224
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	377	743	710	370	637	543	270	840		417	731	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	22	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.30	0.57	0.10	0.37	0.59	0.82	0.22	0.74		1.03	0.74	0.72

Intersection Summary

Area Type: Other

Cycle Length: 190

Actuated Cycle Length: 160.1

Natural Cycle: 140

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 73.8 Intersection LOS: E

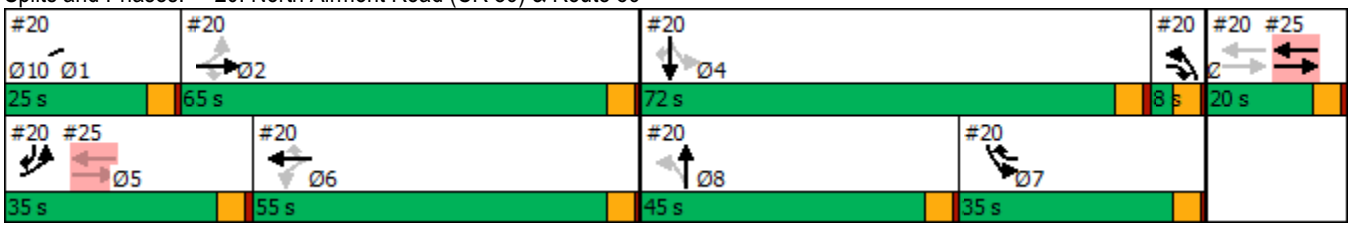
Intersection Capacity Utilization 111.0% ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

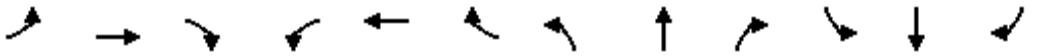
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

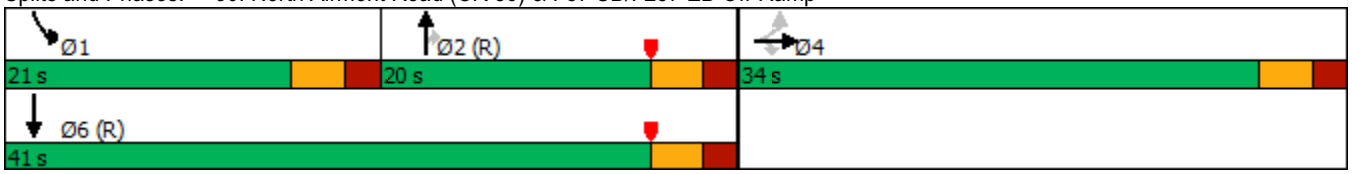


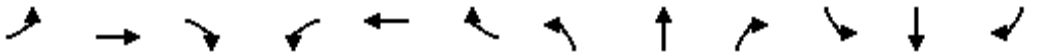
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	3	317	0	0	0	0	723	723	469	1213	0
Future Volume (vph)	278	3	317	0	0	0	0	723	723	469	1213	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1632	3485	3558	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1610	3482	3558	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						479			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	4%	3%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	320	0	0	0	0	730	730	474	1225	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	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)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		18.5	18.5					27.4	27.4	14.0	46.5	
Actuated g/C Ratio		0.25	0.25					0.37	0.37	0.19	0.62	
v/c Ratio		0.74	0.73					0.63	0.82	0.73	0.56	
Control Delay		37.3	26.5					18.6	14.3	30.3	3.7	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	26.5					18.6	14.3	30.3	3.9	
LOS		D	C					B	B	C	A	
Approach Delay		31.6						16.4			11.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		122	92					47	9	81	0	
Queue Length 95th (ft)		176	156					#279	#345	m138	m210	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1163	892	743	2203	
Starvation Cap Reductn		0	0					0	0	0	224	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.47	0.51					0.63	0.82	0.64	0.62	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	3	317	0	0	0	0	723	723	469	1213	0
Future Volume (veh/h)	278	3	317	0	0	0	0	723	723	469	1213	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1859	2052	2037	0
Adj Flow Rate, veh/h	281	3	320				0	730	730	474	1225	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	4	3	4	0
Cap, veh/h	432	5	365				0	1258	603	590	2343	0
Arrive On Green	0.26	0.26	0.26				0.00	0.38	0.38	0.16	0.61	0.00
Sat Flow, veh/h	1652	18	1397				0	3370	1574	3791	3971	0
Grp Volume(v), veh/h	284	0	320				0	730	730	474	1225	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1574	1895	1935	0
Q Serve(g_s), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	13.7	0.0
Cycle Q Clear(g_c), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	13.7	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	436	0	365				0	1258	603	590	2343	0
V/C Ratio(X)	0.65	0.00	0.88				0.00	0.58	1.21	0.80	0.52	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1258	603	809	2343	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.42	0.42	0.00
Uniform Delay (d), s/veh	24.7	0.0	26.5				0.0	18.4	23.1	30.5	8.5	0.0
Incr Delay (d2), s/veh	0.6	0.0	7.7				0.0	2.0	109.5	1.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	10.0				0.0	8.7	41.5	6.2	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	34.2				0.0	20.3	132.7	31.8	8.9	0.0
LnGrp LOS	C	A	C				A	C	F	C	A	A
Approach Vol, veh/h		604						1460			1699	
Approach Delay, s/veh		30.0						76.5			15.3	
Approach LOS		C						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.7	33.7		24.6		50.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.0	0.0		18.5		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

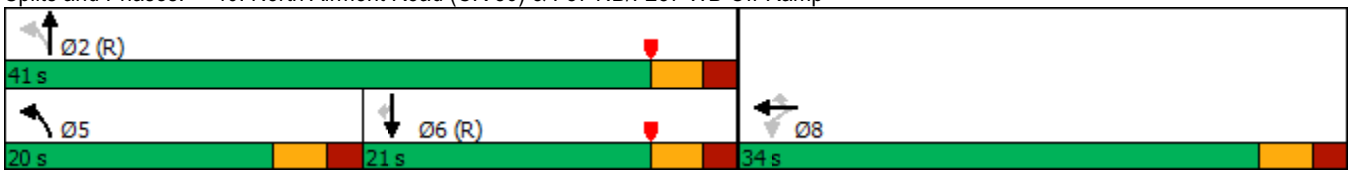
Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	812	2	462	391	610	0	0	870	427
Future Volume (vph)	0	0	0	812	2	462	391	610	0	0	870	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1665	1670	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.152					
Satd. Flow (perm)	0	0	0	1665	1670	1583	238	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						200						376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							3					3
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%	0%	3%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	414	417	471	399	622	0	0	888	436
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				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)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				23.7	23.7	23.7	41.3	41.3			21.3	21.3
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.28	0.28
v/c Ratio				0.79	0.79	0.74	1.05	0.37			0.87	0.63
Control Delay				34.1	34.3	19.7	72.6	3.9			43.9	19.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

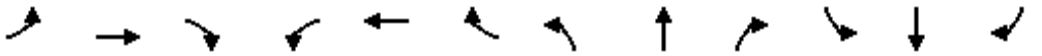
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.1	34.3	19.7	72.6	3.9			43.9	19.5
LOS				C	C	B	E	A			D	B
Approach Delay					28.9			30.8			35.9	
Approach LOS					C			C			D	
Queue Length 50th (ft)				177	178	107	~161	33			237	102
Queue Length 95th (ft)				261	263	195	#317	16			#393	m169
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				643	645	734	381	1687			1020	696
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				0.64	0.65	0.64	1.05	0.37			0.87	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 32.0		Intersection LOS: C	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	2	31	59	2	62	40	1248	68	67	1421	11
Future Volume (vph)	66	2	31	59	2	62	40	1248	68	67	1421	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.992			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3305	0	1718	3420	0
Flt Permitted		0.703			0.820		0.098			0.104		
Satd. Flow (perm)	0	1295	0	0	1549	0	164	3305	0	188	3420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			9			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		4.1			10.5			4.2			3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	5%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	133	0	43	1431	0	73	1557	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.7			12.7		53.8	46.5		54.8	49.5	
Actuated g/C Ratio		0.17			0.17		0.72	0.62		0.73	0.66	
v/c Ratio		0.44			0.42		0.14	0.70		0.21	0.69	
Control Delay		26.0			18.7		4.8	16.3		8.0	11.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.0			18.7		4.8	16.3		8.0	11.8	
LOS		C			B		A	B		A	B	
Approach Delay		26.0			18.7			16.0			11.6	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		33			28		4	259		8	161	
Queue Length 95th (ft)		73			71		15	#463		m29	#490	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		367			461		328	2054		362	2256	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.29		0.13	0.70		0.20	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 14.3 Intersection LOS: B

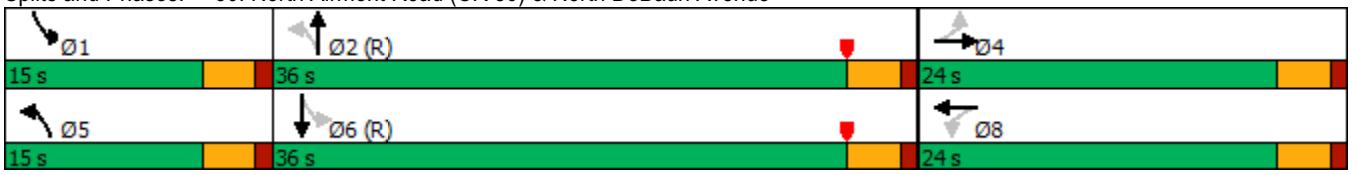
Intersection Capacity Utilization 66.3% ICU Level of Service C

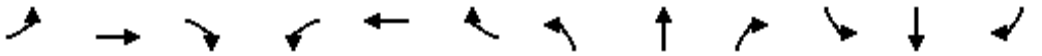
Analysis Period (min) 15

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

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

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue

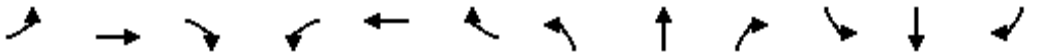




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	2	31	59	2	62	40	1248	68	67	1421	11
Future Volume (veh/h)	66	2	31	59	2	62	40	1248	68	67	1421	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1826	1900	2057	1997	2057
Adj Flow Rate, veh/h	72	2	34	64	2	67	43	1357	74	73	1545	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	5	0	0	4	0
Cap, veh/h	212	21	70	161	21	113	354	2019	110	437	2426	19
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.10	0.63	0.63
Sat Flow, veh/h	994	156	528	679	161	853	1725	3346	182	1959	3859	30
Grp Volume(v), veh/h	108	0	0	133	0	0	43	702	729	73	759	798
Grp Sat Flow(s),veh/h/ln	1678	0	0	1692	0	0	1725	1735	1793	1959	1897	1992
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.6	20.2	20.4	0.8	18.6	18.6
Cycle Q Clear(g_c), s	4.0	0.0	0.0	5.1	0.0	0.0	0.6	20.2	20.4	0.8	18.6	18.6
Prop In Lane	0.67		0.31	0.48		0.50	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	302	0	0	295	0	0	354	1047	1082	437	1193	1252
V/C Ratio(X)	0.36	0.00	0.00	0.45	0.00	0.00	0.12	0.67	0.67	0.17	0.64	0.64
Avail Cap(c_a), veh/h	502	0	0	505	0	0	471	1047	1082	520	1193	1252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	6.0	9.9	9.9	6.7	8.6	8.6
Incr Delay (d2), s/veh	2.6	0.0	0.0	3.9	0.0	0.0	0.6	3.4	3.4	0.6	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	4.5	0.0	0.0	0.4	11.8	12.1	0.6	11.3	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	34.3	0.0	0.0	6.6	13.3	13.3	7.3	11.2	11.1
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	B	B
Approach Vol, veh/h		108			133			1474			1630	
Approach Delay, s/veh		32.5			34.3			13.1			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	49.3		13.9	9.9	51.1		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	22.4		6.0	2.6	20.6		7.1				
Green Ext Time (p_c), s	0.2	8.7		0.9	0.1	10.5		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.6	
HCM 6th LOS		B	

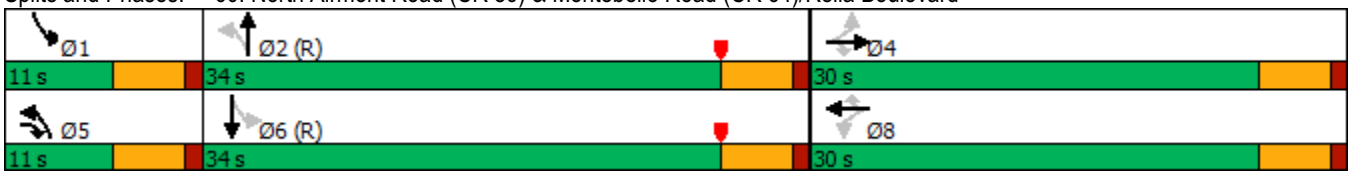


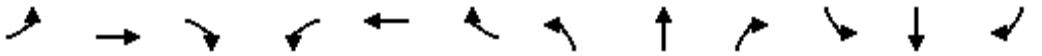
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	9	238	92	34	72	293	790	48	35	875	120
Future Volume (vph)	129	9	238	92	34	72	293	790	48	35	875	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	10	11	10	10	11	12	12	13	13	11
Grade (%)		6%			-6%			2%			-4%	
Storage Length (ft)	0		140	90		35	290		0	290		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			65			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.991			0.982	
Flt Protected		0.955		0.950			0.950			0.950		
Satd. Flow (prot)	0	1666	1433	1762	1723	1553	1710	3352	0	1745	3541	0
Flt Permitted		0.713		0.651			0.126			0.322		
Satd. Flow (perm)	0	1244	1433	1207	1723	1553	227	3352	0	592	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			44			102		10			23	
Link Speed (mph)		30			25			30			30	
Link Distance (ft)		682			448			781			587	
Travel Time (s)		15.5			12.2			17.8			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	6%	0%	2%	2%	6%	0%	1%	6%	0%	9%	6%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	145	251	97	36	76	308	883	0	37	1047	0
Turn Type	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	5	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	15.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0		10.0	15.0	
Total Split (s)	30.0	30.0	11.0	30.0	30.0	30.0	11.0	34.0		11.0	34.0	
Total Split (%)	40.0%	40.0%	14.7%	40.0%	40.0%	40.0%	14.7%	45.3%		14.7%	45.3%	
Maximum Green (s)	25.0	25.0	6.0	25.0	25.0	25.0	6.0	29.0		6.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?			Yes				Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)		14.6	38.2	14.6	14.6	14.6	50.0	43.4		33.1	26.8	
Actuated g/C Ratio		0.19	0.51	0.19	0.19	0.19	0.67	0.58		0.44	0.36	
v/c Ratio		0.60	0.33	0.41	0.11	0.20	0.59	0.45		0.10	0.82	
Control Delay		37.2	11.1	30.6	23.5	4.2	18.2	13.1		7.1	27.1	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		37.2	11.1	30.6	23.5	4.2	18.2	13.1		7.1	27.1	
LOS		D	B	C	C	A	B	B		A	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		20.6			19.8			14.4			26.4	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)		63	54	40	14	0	48	170		5	216	
Queue Length 95th (ft)		108	106	75	34	20	#225	260		17	285	
Internal Link Dist (ft)		602			368			701			507	
Turn Bay Length (ft)			140	90		35	290			290		
Base Capacity (vph)		414	750	402	574	585	518	1941		361	1383	
Starvation Cap Reductn		0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn		0	0	0	0	0	0	0		0	0	
Storage Cap Reductn		0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio		0.35	0.33	0.24	0.06	0.13	0.59	0.45		0.10	0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 56 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		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: 60: North Airmont Road (CR 89) & Montebello Road (CR 64)/Rella Boulevard





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	9	238	92	34	72	293	790	48	35	875	120
Future Volume (veh/h)	129	9	238	92	34	72	293	790	48	35	875	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1599	1688	1658	2106	2046	2136	1862	1788	1876	1999	2046	2027
Adj Flow Rate, veh/h	136	9	251	97	36	76	308	832	51	37	921	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	0	2	2	6	0	1	6	0	9	6	2
Cap, veh/h	310	17	391	457	406	359	424	1839	113	515	1792	245
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.16	1.00	1.00	0.04	0.52	0.52
Sat Flow, veh/h	1096	88	1405	1583	2046	1810	1773	3251	199	1904	3435	470
Grp Volume(v), veh/h	145	0	251	97	36	76	308	435	448	37	521	526
Grp Sat Flow(s),veh/h/ln	1183	0	1405	1583	2046	1810	1773	1698	1752	1904	1944	1961
Q Serve(g_s), s	7.8	0.0	11.8	0.0	1.1	2.6	6.0	0.0	0.0	0.7	13.1	13.1
Cycle Q Clear(g_c), s	8.8	0.0	11.8	3.1	1.1	2.6	6.0	0.0	0.0	0.7	13.1	13.1
Prop In Lane	0.94		1.00	1.00		1.00	1.00		0.11	1.00		0.24
Lane Grp Cap(c), veh/h	328	0	391	457	406	359	424	961	991	515	1014	1023
V/C Ratio(X)	0.44	0.00	0.64	0.21	0.09	0.21	0.73	0.45	0.45	0.07	0.51	0.51
Avail Cap(c_a), veh/h	498	0	581	670	682	603	424	961	991	599	1014	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	23.8	25.3	24.5	25.2	10.7	0.0	0.0	7.5	11.7	11.7
Incr Delay (d2), s/veh	0.9	0.0	1.8	0.2	0.1	0.3	5.2	1.3	1.3	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.0	7.1	2.6	0.9	2.1	4.3	0.6	0.6	0.4	9.4	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	0.0	25.5	25.6	24.6	25.4	16.0	1.3	1.3	7.5	13.6	13.6
LnGrp LOS	C	A	C	C	C	C	B	A	A	A	B	B
Approach Vol, veh/h		396			209			1191			1084	
Approach Delay, s/veh		26.8			25.4			5.1			13.4	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	47.4		19.9	11.0	44.1		19.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	29.0		25.0	6.0	29.0		25.0				
Max Q Clear Time (g_c+I1), s	2.7	2.0		13.8	8.0	15.1		5.1				
Green Ext Time (p_c), s	0.0	3.3		1.1	0.0	3.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		12.7	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	18	474	9	5	505
Future Vol, veh/h	29	18	474	9	5	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	-8	-	-1	-	-	-3
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	35	22	571	11	6	608

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1197	577	0	0	582	0
Stage 1	577	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Critical Hdwy	4.8	5.4	-	-	4.1	-
Critical Hdwy Stg 1	3.8	-	-	-	-	-
Critical Hdwy Stg 2	3.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	353	591	-	-	1002	-
Stage 1	731	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	350	591	-	-	1002	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	706	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	415	1002	-
HCM Lane V/C Ratio	-	-	0.136	0.006	-
HCM Control Delay (s)	-	-	15	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	847	18	171	836	23	113
Future Vol, veh/h	847	18	171	836	23	113
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	7	6	4	0	7
Mvmt Flow	901	19	182	889	24	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	920	0	2164	911
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	1253	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	726	-	85	360
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	359	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	726	-	64	360
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	269	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	26.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	310	-	-	726	-
HCM Lane V/C Ratio	0.467	-	-	0.251	-
HCM Control Delay (s)	26.4	-	-	11.6	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.4	-	-	1	-

Intersection	
Int Delay, s/veh	40.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	78	173	257	151	6	163	8	206	3	5	3
Future Vol, veh/h	0	78	173	257	151	6	163	8	206	3	5	3
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, %	-	6	-	-	-2	-	-	-4	-	-	-2	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	11	5	7	8	17	4	0	6	0	25	0
Mvmt Flow	0	88	194	289	170	7	183	9	231	3	6	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	177	0	0	282	0	0	941	940	185	1057	1034	174
Stage 1	-	-	-	-	-	-	185	185	-	752	752	-
Stage 2	-	-	-	-	-	-	756	755	-	305	282	-
Critical Hdwy	4.1	-	-	4.17	-	-	6.34	5.7	5.86	6.7	6.35	6
Critical Hdwy Stg 1	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.34	4.7	-	5.7	5.35	-
Follow-up Hdwy	2.2	-	-	2.263	-	-	3.536	4	3.354	3.5	4.225	3.3
Pot Cap-1 Maneuver	1411	-	-	1252	-	-	297	327	865	230	237	883
Stage 1	-	-	-	-	-	-	846	782	-	441	420	-
Stage 2	-	-	-	-	-	-	470	496	-	733	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1411	-	-	1252	-	-	232	243	865	132	176	883
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	243	-	132	176	-
Stage 1	-	-	-	-	-	-	846	782	-	441	312	-
Stage 2	-	-	-	-	-	-	342	369	-	531	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.4	106.5	24
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	1411	-	-	1252	-	-	202
HCM Lane V/C Ratio	1.095	-	-	-	0.231	-	-	0.061
HCM Control Delay (s)	106.5	0	-	-	8.7	0	-	24
HCM Lane LOS	F	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	15.1	0	-	-	0.9	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	491	47	129	513	93	125	196	59	160	194	152
Future Volume (vph)	185	491	47	129	513	93	125	196	59	160	194	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.98	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.965			0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1749	1432	1752	1727	1252	1901	1739	0	1572	1769	0
Flt Permitted	0.115			0.116			0.151			0.321		
Satd. Flow (perm)	203	1749	1432	214	1727	1221	302	1739	0	530	1769	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			138		13			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)	2					2	1		2	2		1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	5%	9%	3%	10%	29%	6%	5%	11%	21%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	599	57	157	626	113	152	311	0	195	422	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	40.0		15.0	40.0	
Total Split (%)	12.6%	33.6%	12.6%	12.6%	33.6%	12.6%	12.6%	33.6%		12.6%	33.6%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	34.0		9.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		2			2			3			3	
Act Effct Green (s)	43.8	35.7	49.2	43.2	35.4	43.4	35.2	26.7		36.3	27.3	
Actuated g/C Ratio	0.41	0.33	0.46	0.40	0.33	0.41	0.33	0.25		0.34	0.26	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	8%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.09	1.02	0.08	0.74	1.09	0.19	0.67	0.70		0.73	0.89	
Control Delay	114.5	79.8	0.2	43.8	100.4	2.9	37.7	43.9		41.8	56.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	114.5	79.8	0.2	43.8	100.4	2.9	37.7	43.9		41.8	56.8	
LOS	F	E	A	D	F	A	D	D		D	E	
Approach Delay		83.6			78.2			41.9			52.0	
Approach LOS		F			E			D			D	
Queue Length 50th (ft)	~120	~437	0	59	~479	0	63	176		85	246	
Queue Length 95th (ft)	#282	#580	0	#149	#657	15	108	262		140	354	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	208	585	742	218	573	581	237	568		269	592	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	1.09	1.02	0.08	0.72	1.09	0.19	0.64	0.55		0.72	0.71	

Intersection Summary

Area Type: Other

Cycle Length: 119

Actuated Cycle Length: 106.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 68.3 Intersection LOS: E

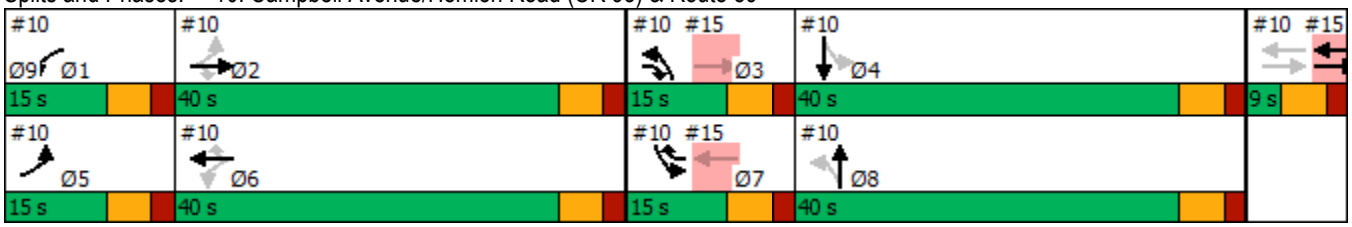
Intersection Capacity Utilization 83.7% ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

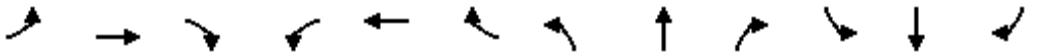
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	483	333	19	83	252	312	46	576	113	461	301	506
Future Volume (vph)	483	333	19	83	252	312	46	576	113	461	301	506
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1724	1724	1168	1811	1761	1299	1555	3343	0	1656	1627	1370
Flt Permitted	0.152			0.556			0.261			0.127		
Satd. Flow (perm)	276	1724	1168	1060	1761	1299	427	3343	0	221	1627	1370
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					11				416
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
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 (%)	6%	8%	31%	4%	9%	13%	15%	4%	6%	9%	9%	10%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	493	340	19	85	257	318	47	703	0	470	307	516
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	9.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	10.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	15.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	56.5	48.8	81.9	29.7	27.0	51.5	73.0	40.1		61.5	31.4	61.5
Actuated g/C Ratio	0.38	0.33	0.55	0.20	0.18	0.34	0.49	0.27		0.41	0.21	0.41
v/c Ratio	1.24	0.60	0.03	0.34	0.81	0.71	0.09	0.78		1.24	0.90	0.64
Control Delay	167.9	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	7.3

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	167.9	43.8	0.1	38.6	67.8	35.7	24.9	57.3		172.1	85.6	7.3
LOS	F	D	A	D	E	D	C	E		F	F	A
Approach Delay		114.6			48.6			55.3			85.8	
Approach LOS		F			D			E			F	
Queue Length 50th (ft)	~510	270	0	49	238	129	22	322		~510	293	34
Queue Length 95th (ft)	#868	319	0	105	234	230	54	452		#793	409	99
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	396	760	685	395	658	447	501	906		380	732	809
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.24	0.45	0.03	0.22	0.39	0.71	0.09	0.78		1.24	0.42	0.64

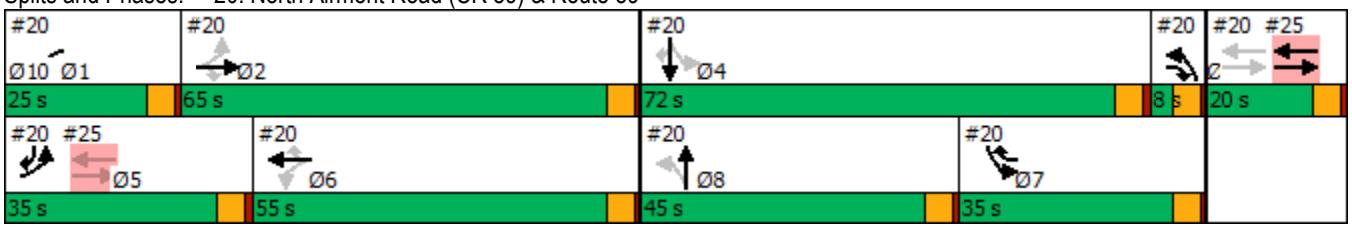
Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 149.3
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 79.4 Intersection LOS: E
Intersection Capacity Utilization 101.8% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

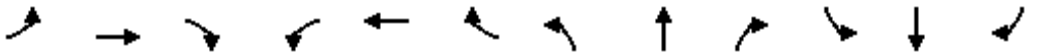
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

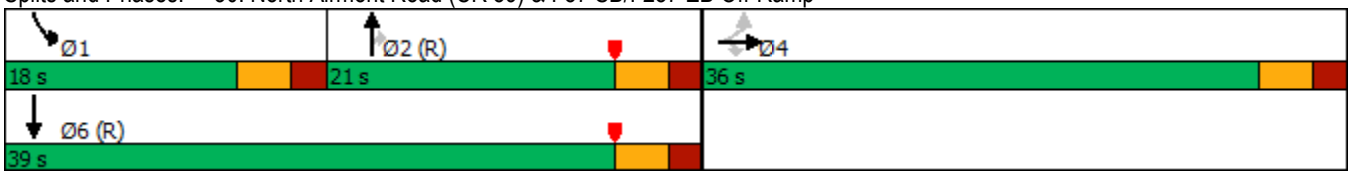


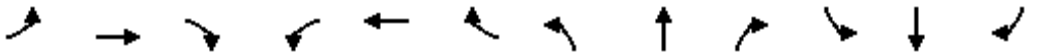
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	6	440	0	0	0	0	586	722	402	895	0
Future Volume (vph)	351	6	440	0	0	0	0	586	722	402	895	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1562	1357	0	0	0	0	3042	1586	3519	3426	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1562	1357	0	0	0	0	3042	1586	3519	3426	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						599			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	13%	13%	16%	0%	0%	0%	0%	13%	7%	2%	8%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	444	0	0	0	0	592	729	406	904	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	36.0	36.0	36.0					21.0	21.0	18.0	39.0	
Total Split (%)	48.0%	48.0%	48.0%					28.0%	28.0%	24.0%	52.0%	
Maximum Green (s)	31.0	31.0	31.0					16.0	16.0	13.0	34.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	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)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		24.5	24.5					23.4	23.4	12.1	40.5	
Actuated g/C Ratio		0.33	0.33					0.31	0.31	0.16	0.54	
v/c Ratio		0.71	0.87					0.62	0.80	0.71	0.49	
Control Delay		29.2	35.3					23.1	16.7	33.9	9.6	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		29.2	35.3					23.1	16.7	33.9	9.6	
LOS		C	D					C	B	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6						19.6			17.2	
Approach LOS		C						B			B	
Queue Length 50th (ft)		140	145					130	142	79	65	
Queue Length 95th (ft)		206	241					#229	#257	m112	m181	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		645	620					948	906	609	1850	
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		0.56	0.72					0.62	0.80	0.67	0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	6	440	0	0	0	0	586	722	402	895	0
Future Volume (veh/h)	351	6	440	0	0	0	0	586	722	402	895	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1560	1560	1516				0	1654	1813	2067	1977	0
Adj Flow Rate, veh/h	355	6	444				0	592	729	406	904	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	13	13	16				0	13	7	2	8	0
Cap, veh/h	543	9	477				0	917	448	522	1859	0
Arrive On Green	0.37	0.37	0.37				0.00	0.29	0.29	0.05	0.16	0.00
Sat Flow, veh/h	1462	25	1284				0	3226	1536	3818	3854	0
Grp Volume(v), veh/h	361	0	444				0	592	729	406	904	0
Grp Sat Flow(s),veh/h/ln	1487	0	1284				0	1572	1536	1909	1878	0
Q Serve(g_s), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	16.4	0.0
Cycle Q Clear(g_c), s	15.1	0.0	24.9				0.0	12.3	21.9	7.9	16.4	0.0
Prop In Lane	0.98		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	477				0	917	448	522	1859	0
V/C Ratio(X)	0.65	0.00	0.93				0.00	0.65	1.63	0.78	0.49	0.00
Avail Cap(c_a), veh/h	615	0	531				0	917	448	662	1859	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	19.6	0.0	22.6				0.0	23.2	26.6	34.7	22.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	21.0				0.0	3.5	292.3	1.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	0.0	14.8				0.0	8.4	68.9	6.4	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	43.6				0.0	26.7	318.9	36.6	23.2	0.0
LnGrp LOS	C	A	D				A	C	F	D	C	A
Approach Vol, veh/h		805						1321			1310	
Approach Delay, s/veh		33.5						187.9			27.3	
Approach LOS		C						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.3	26.9		32.9		42.1
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	13.0	16.0		31.0		34.0
Max Q Clear Time (g_c+I1), s	9.9	0.0		26.9		0.0
Green Ext Time (p_c), s	0.4	0.0		1.0		0.0

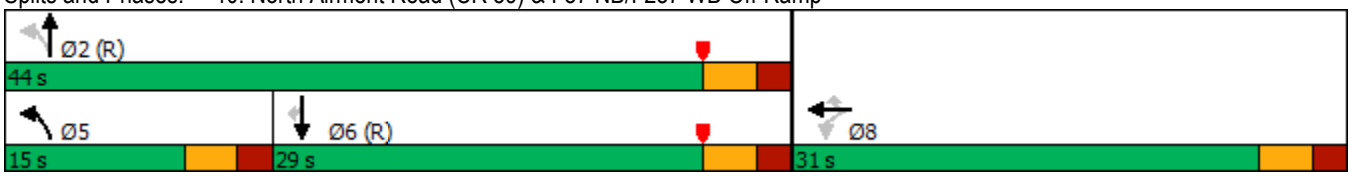
Intersection Summary	
HCM 6th Ctrl Delay	90.5
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	651	1	321	287	650	0	0	646	293
Future Volume (vph)	0	0	0	651	1	321	287	650	0	0	646	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt						0.850						0.850
Flt Protected				0.950	0.952		0.950					
Satd. Flow (prot)	0	0	0	1559	1562	1553	1355	2979	0	0	3628	1534
Flt Permitted				0.950	0.952		0.143					
Satd. Flow (perm)	0	0	0	1559	1562	1553	204	2979	0	0	3628	1500
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						113						401
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles (%)	0%	0%	0%	10%	0%	4%	23%	8%	0%	0%	3%	9%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	446	447	440	393	890	0	0	885	401
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				31.0	31.0	31.0	15.0	44.0			29.0	29.0
Total Split (%)				41.3%	41.3%	41.3%	20.0%	58.7%			38.7%	38.7%
Maximum Green (s)				26.0	26.0	26.0	10.0	39.0			24.0	24.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				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)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.1	24.1	24.1	40.9	40.9			25.9	25.9
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.55			0.35	0.35
v/c Ratio				0.89	0.89	0.77	1.49	0.55			0.71	0.51
Control Delay				46.1	46.1	26.4	257.3	11.7			27.1	9.0
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				46.1	46.1	26.4	257.3	11.7			27.1	9.0
LOS				D	D	C	F	B			C	A
Approach Delay					39.6			86.9			21.4	
Approach LOS					D			F			C	
Queue Length 50th (ft)				196	196	130	~229	150			154	9
Queue Length 95th (ft)				232	232	161	#290	152			224	68
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				540	541	612	264	1625			1253	780
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				0.83	0.83	0.72	1.49	0.55			0.71	0.51

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.49			
Intersection Signal Delay: 49.2		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	0	32	17	0	20	36	1325	10	22	1219	5
Future Volume (vph)	66	0	32	17	0	20	36	1325	10	22	1219	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.928			0.999			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1725	0	0	1676	0	1574	3290	0	1718	3231	0
Flt Permitted		0.774			0.880		0.135			0.126		
Satd. Flow (perm)	0	1379	0	0	1509	0	224	3290	0	228	3231	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			73			1			1	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		5.0			12.6			4.2			3.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	0%	22%	0%	0%	18%	7%	6%	0%	0%	10%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	41	0	40	1483	0	24	1360	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.0		3.5	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		11.5			11.5		56.7	53.5		55.9	50.7	
Actuated g/C Ratio		0.15			0.15		0.76	0.71		0.75	0.68	
v/c Ratio		0.40			0.14		0.11	0.63		0.07	0.62	
Control Delay		16.3			3.8		3.9	11.6		3.1	8.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.3			3.8		3.9	11.6		3.1	8.9	
LOS		B			A		A	B		A	A	
Approach Delay		16.3			3.8			11.4			8.8	
Approach LOS		B			A			B			A	
Queue Length 50th (ft)		15			0		4	121		2	174	
Queue Length 95th (ft)		55			11		13	#467		m6	230	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		421			455		368	2346		390	2183	
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		0.26			0.09		0.11	0.63		0.06	0.62	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 10.3 Intersection LOS: B

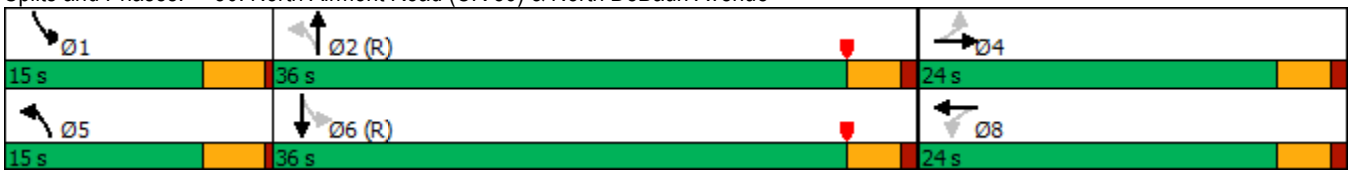
Intersection Capacity Utilization 52.1% ICU Level of Service A

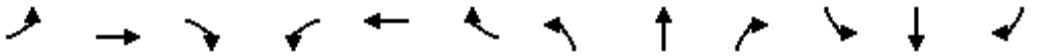
Analysis Period (min) 15

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

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

Splits and Phases: 50: North Airmont Road (CR 89) & North DeBaun Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	32	17	0	20	36	1325	10	22	1219	5
Future Volume (veh/h)	66	0	32	17	0	20	36	1325	10	22	1219	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1976	1637	1976	1976	1699	1796	1811	1900	2057	1907	1682
Adj Flow Rate, veh/h	73	0	36	19	0	22	40	1472	11	24	1354	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	22	0	0	18	7	6	0	0	10	25
Cap, veh/h	199	16	67	147	24	117	389	2311	17	360	2357	10
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.08	0.66	0.66	0.05	0.64	0.64
Sat Flow, veh/h	934	128	524	601	192	918	1711	3501	26	1959	3700	16
Grp Volume(v), veh/h	109	0	0	41	0	0	40	723	760	24	663	697
Grp Sat Flow(s),veh/h/ln	1586	0	0	1712	0	0	1711	1721	1806	1959	1812	1904
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.5	18.5	18.5	0.3	15.7	15.7
Cycle Q Clear(g_c), s	4.6	0.0	0.0	1.5	0.0	0.0	0.5	18.5	18.5	0.3	15.7	15.7
Prop In Lane	0.67		0.33	0.46		0.54	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	282	0	0	288	0	0	389	1136	1192	360	1154	1213
V/C Ratio(X)	0.39	0.00	0.00	0.14	0.00	0.00	0.10	0.64	0.64	0.07	0.57	0.57
Avail Cap(c_a), veh/h	495	0	0	506	0	0	511	1136	1192	545	1154	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.2	0.0	0.0	5.0	7.5	7.5	5.7	7.8	7.8
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.8	0.0	0.0	0.4	2.7	2.6	0.3	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	0.0	0.0	1.3	0.0	0.0	0.3	10.1	10.5	0.2	9.4	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	0.0	30.0	0.0	0.0	5.4	10.2	10.1	5.9	9.9	9.8
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	A	A
Approach Vol, veh/h		109			41			1523			1384	
Approach Delay, s/veh		33.6			30.0			10.0			9.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	53.5		13.6	9.7	51.8		13.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.3	20.5		6.6	2.5	17.7		3.5				
Green Ext Time (p_c), s	0.0	10.5		0.9	0.1	12.3		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	691	19	76	728	7	144
Future Vol, veh/h	691	19	76	728	7	144
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	6	11	10	17	3
Mvmt Flow	720	20	79	758	7	150

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	740	0	1646	730
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	916	-
Critical Hdwy	-	-	4.21	-	5.77	5.83
Critical Hdwy Stg 1	-	-	-	-	4.77	-
Critical Hdwy Stg 2	-	-	-	-	4.77	-
Follow-up Hdwy	-	-	2.299	-	3.653	3.327
Pot Cap-1 Maneuver	-	-	827	-	145	456
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	827	-	131	456
Mov Cap-2 Maneuver	-	-	-	-	268	-
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	407	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	17.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	442	-	-	827	-
HCM Lane V/C Ratio	0.356	-	-	0.096	-
HCM Control Delay (s)	17.6	-	-	9.8	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.6	-	-	0.3	-

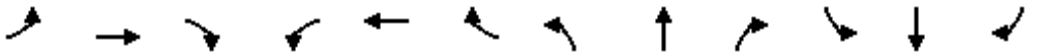
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	20	435	491	0
Future Vol, veh/h	0	20	20	435	491	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	100	100	7	7	0
Mvmt Flow	0	27	27	588	664	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1306	664	664	0	-	0
Stage 1	664	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Critical Hdwy	6.2	7.1	5.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	192	332	595	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	332	595	-	-	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	595	-	332	-	-
HCM Lane V/C Ratio	0.045	-	0.081	-	-
HCM Control Delay (s)	11.3	0	16.8	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	583	106	85	672	122	171	171	105	197	188	187
Future Volume (vph)	212	583	106	85	672	122	171	171	105	197	188	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	12	12	15	12	12	13	13	13
Grade (%)		0%			0%			-3%			-4%	
Storage Length (ft)	75		310	180		560	150		0	145		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	115			105			65			40		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.99		1.00		
Frt			0.850			0.850		0.943			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1646	1766	1516	1752	1810	1357	1919	1724	0	1684	1756	0
Flt Permitted	0.103			0.176			0.253			0.247		
Satd. Flow (perm)	178	1766	1516	325	1810	1357	511	1724	0	437	1756	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			165		26			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		581			1449			423			450	
Travel Time (s)		13.2			32.9			9.6			10.2	
Confl. Peds. (#/hr)									1	1		
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 (%)	6%	4%	3%	3%	5%	19%	5%	5%	4%	13%	6%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	601	109	88	693	126	176	284	0	203	387	0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6	7	3	8		7	4	
Permitted Phases	2	9	2	6	9	6	8			4		
Detector Phase	5	2	3	1	6	7	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	10.0	3.0	3.0	10.0	3.0	3.0	5.0		3.0	5.0	
Minimum Split (s)	9.0	16.0	9.0	9.0	16.0	9.0	9.0	11.0		9.0	11.0	
Total Split (s)	15.0	40.0	15.0	15.0	40.0	15.0	15.0	20.0		15.0	20.0	
Total Split (%)	15.2%	40.4%	15.2%	15.2%	40.4%	15.2%	15.2%	20.2%		15.2%	20.2%	
Maximum Green (s)	9.0	34.0	9.0	9.0	34.0	9.0	9.0	14.0		9.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Recall Mode	None	Min	None	None	Min	None	None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		14.0			18.0			17.0			16.0	
Pedestrian Calls (#/hr)		0			0			1			1	
Act Effct Green (s)	45.9	39.2	53.4	41.1	34.7	49.3	24.5	15.8		25.2	16.1	
Actuated g/C Ratio	0.49	0.42	0.57	0.44	0.37	0.53	0.26	0.17		0.27	0.17	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.0
Total Split (s)	9.0
Total Split (%)	9%
Maximum Green (s)	3.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.96	0.81	0.12	0.36	1.04	0.16	0.67	0.91		0.86	1.15	
Control Delay	75.5	36.7	0.9	17.3	74.9	1.6	37.7	68.6		58.8	129.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	75.5	36.7	0.9	17.3	74.9	1.6	37.7	68.6		58.8	129.8	
LOS	E	D	A	B	E	A	D	E		E	F	
Approach Delay		41.6			59.1			56.8			105.4	
Approach LOS		D			E			E			F	
Queue Length 50th (ft)	80	302	0	23	~399	0	74	149		88	~258	
Queue Length 95th (ft)	#293	#599	8	66	#789	17	#140	265		#199	#425	
Internal Link Dist (ft)		501			1369			343			370	
Turn Bay Length (ft)	75		310	180		560	150			145		
Base Capacity (vph)	228	738	939	287	669	790	271	312		237	336	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.96	0.81	0.12	0.31	1.04	0.16	0.65	0.91		0.86	1.15	

Intersection Summary

Area Type: Other

Cycle Length: 99

Actuated Cycle Length: 93.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 62.6 Intersection LOS: E

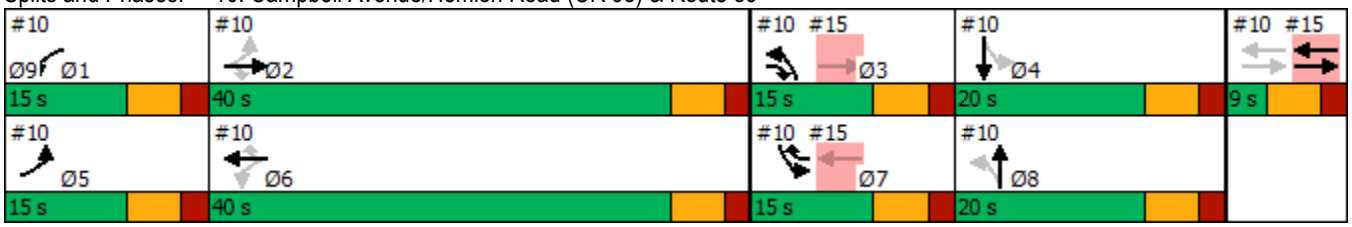
Intersection Capacity Utilization 97.9% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

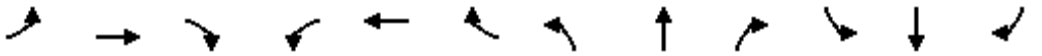
Splits and Phases: 10: Campbell Avenue/Hemion Road (CR 93) & Route 59



Lane Group	Ø9
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	496	414	70	133	362	432	58	448	154	417	507	607
Future Volume (vph)	496	414	70	133	362	432	58	448	154	417	507	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	11	13	12	9	11	11	11	12	10	10
Grade (%)		4%			-2%			-5%			0%	
Storage Length (ft)	330		145	175		170	140		140	100		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	65			130			200			30		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00				0.99		1.00		
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1692	1808	1457	1829	1828	1398	1626	3279	0	1703	1739	1422
Flt Permitted	0.108			0.364			0.100			0.211		
Satd. Flow (perm)	192	1808	1424	700	1828	1398	171	3279	0	378	1739	1422
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			98					23				258
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1140			915			417			588	
Travel Time (s)		25.9			20.8			9.5			13.4	
Confl. Peds. (#/hr)			1	1					2	2		
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 (%)	8%	3%	5%	3%	5%	5%	10%	4%	5%	6%	2%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	511	427	72	137	373	445	60	621	0	430	523	626
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2	10	2	6	10	6	8			4		4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	5.0	10.0	3.0	3.0	10.0	3.0	3.0	10.0		3.0	15.0	5.0
Minimum Split (s)	10.0	15.0	8.0	8.0	15.0	8.0	8.0	15.0		8.0	20.0	10.0
Total Split (s)	35.0	65.0	8.0	25.0	55.0	35.0	8.0	45.0		35.0	72.0	35.0
Total Split (%)	18.4%	34.2%	4.2%	13.2%	28.9%	18.4%	4.2%	23.7%		18.4%	37.9%	18.4%
Maximum Green (s)	30.0	60.0	3.0	20.0	50.0	30.0	3.0	40.0		30.0	67.0	30.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0		3.0	3.0	3.0
Recall Mode	None	None	Max	None	None	Max	Max	Max		Max	None	None
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		24.0			24.0			24.0			24.0	
Pedestrian Calls (#/hr)		1			1			2			2	
Act Effct Green (s)	67.3	56.5	73.4	43.4	37.7	62.3	62.4	40.2		71.4	47.9	78.0
Actuated g/C Ratio	0.42	0.35	0.46	0.27	0.24	0.39	0.39	0.25		0.45	0.30	0.49

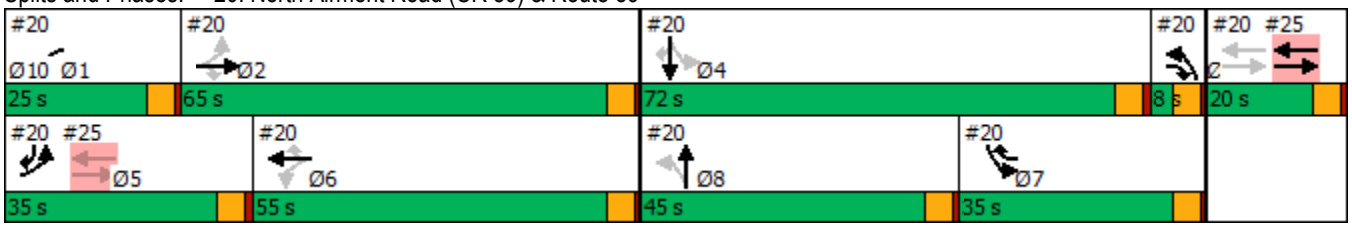
Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	11%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.41	0.67	0.10	0.51	0.87	0.82	0.22	0.74		1.03	1.01	0.76
Control Delay	237.3	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.1	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.0
Total Delay	237.3	46.6	1.8	39.5	72.3	37.4	46.9	60.5		105.4	96.4	15.7
LOS	F	D	A	D	E	D	D	E		F	F	B
Approach Delay		139.9			51.4			59.3			66.8	
Approach LOS		F			D			E			E	
Queue Length 50th (ft)	~636	367	0	81	371	200	33	298		331	~599	168
Queue Length 95th (ft)	#1016	404	12	156	342	#376	#116	428		#682	698	250
Internal Link Dist (ft)		1060			835			337			508	
Turn Bay Length (ft)	330		145	175		170	140			100		
Base Capacity (vph)	362	743	710	370	637	543	270	840		417	731	825
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	22	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.41	0.57	0.10	0.37	0.59	0.82	0.22	0.74		1.03	0.74	0.76

Intersection Summary

Area Type: Other
Cycle Length: 190
Actuated Cycle Length: 160.1
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 79.6 Intersection LOS: E
Intersection Capacity Utilization 112.1% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

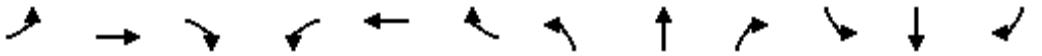
Splits and Phases: 20: North Airmont Road (CR 89) & Route 59



Lane Group	Ø10
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

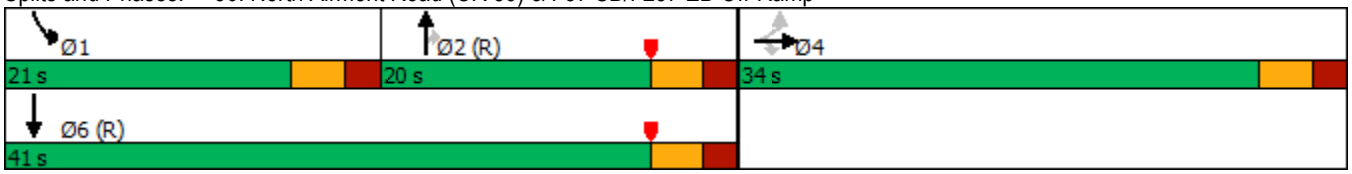


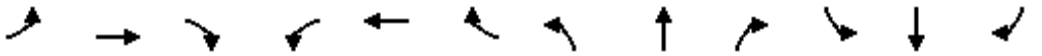
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	3	317	0	0	0	0	723	743	469	1233	0
Future Volume (vph)	278	3	317	0	0	0	0	723	743	469	1233	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	11	14	12	12	12
Grade (%)		5%			0%			3%			-5%	
Storage Length (ft)	120		0	0		0	0		80	150		0
Storage Lanes	1		1	0		0	0		1	2		0
Taper Length (ft)	125			25			25			80		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99	1.00		
Frt			0.850						0.850			
Flt Protected		0.953								0.950		
Satd. Flow (prot)	0	1551	1472	0	0	0	0	3183	1586	3485	3491	0
Flt Permitted		0.953								0.950		
Satd. Flow (perm)	0	1551	1472	0	0	0	0	3183	1564	3482	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						493			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			400			480			504	
Travel Time (s)		21.5			9.1			10.9			11.5	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	14%	0%	7%	0%	0%	0%	0%	8%	7%	3%	6%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	320	0	0	0	0	730	751	474	1245	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	10.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					15.0	15.0	15.0	15.0	
Total Split (s)	34.0	34.0	34.0					20.0	20.0	21.0	41.0	
Total Split (%)	45.3%	45.3%	45.3%					26.7%	26.7%	28.0%	54.7%	
Maximum Green (s)	29.0	29.0	29.0					15.0	15.0	16.0	36.0	
Yellow Time (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
All-Red Time (s)	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)		5.0	5.0					5.0	5.0	5.0	5.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0	2.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		18.5	18.5					27.4	27.4	14.0	46.5	
Actuated g/C Ratio		0.25	0.25					0.37	0.37	0.19	0.62	
v/c Ratio		0.74	0.73					0.63	0.85	0.73	0.58	
Control Delay		37.3	26.5					18.7	16.4	30.0	3.8	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		37.3	26.5					18.7	16.4	30.0	3.9	
LOS		D	C					B	B	C	A	
Approach Delay		31.6						17.5			11.1	
Approach LOS		C						B			B	
Queue Length 50th (ft)		122	92					46	13	78	0	
Queue Length 95th (ft)		176	156					#278	#361	m136	m211	
Internal Link Dist (ft)		866			320			400			424	
Turn Bay Length (ft)									80	150		
Base Capacity (vph)		599	631					1163	884	743	2162	
Starvation Cap Reductn		0	0					0	0	0	194	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.47	0.51					0.63	0.85	0.64	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 118.6%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 30: North Airmont Road (CR 89) & I-87 SB/I-287 EB Off-Ramp

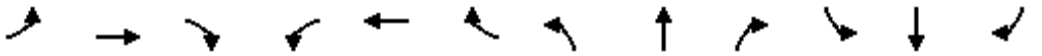




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	3	317	0	0	0	0	723	743	469	1233	0
Future Volume (veh/h)	278	3	317	0	0	0	0	723	743	469	1233	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1545	1753	1649				0	1728	1813	2052	2007	0
Adj Flow Rate, veh/h	281	3	320				0	730	751	474	1245	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	14	0	7				0	8	7	3	6	0
Cap, veh/h	432	5	365				0	1258	588	590	2308	0
Arrive On Green	0.26	0.26	0.26				0.00	0.38	0.38	0.16	0.61	0.00
Sat Flow, veh/h	1652	18	1397				0	3370	1535	3791	3913	0
Grp Volume(v), veh/h	284	0	320				0	730	751	474	1245	0
Grp Sat Flow(s),veh/h/ln	1670	0	1397				0	1642	1535	1895	1906	0
Q Serve(g_s), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	14.3	0.0
Cycle Q Clear(g_c), s	11.4	0.0	16.5				0.0	13.2	28.7	9.0	14.3	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	436	0	365				0	1258	588	590	2308	0
V/C Ratio(X)	0.65	0.00	0.88				0.00	0.58	1.28	0.80	0.54	0.00
Avail Cap(c_a), veh/h	646	0	540				0	1258	588	809	2308	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.38	0.38	0.00
Uniform Delay (d), s/veh	24.7	0.0	26.5				0.0	18.4	23.1	30.5	8.7	0.0
Incr Delay (d2), s/veh	0.6	0.0	7.7				0.0	2.0	137.5	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	10.0				0.0	8.7	47.9	6.1	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	34.2				0.0	20.3	160.6	31.7	9.0	0.0
LnGrp LOS	C	A	C				A	C	F	C	A	A
Approach Vol, veh/h		604						1481			1719	
Approach Delay, s/veh		30.0						91.4			15.3	
Approach LOS		C						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.7	33.7		24.6		50.4
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s	16.0	15.0		29.0		36.0
Max Q Clear Time (g_c+I1), s	11.0	0.0		18.5		0.0
Green Ext Time (p_c), s	0.6	0.0		1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

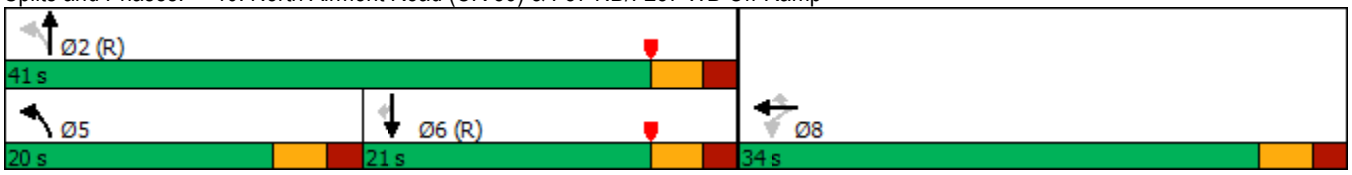


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	832	2	462	391	610	0	0	870	427
Future Volume (vph)	0	0	0	832	2	462	391	610	0	0	870	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	12	12	12
Grade (%)		0%			0%			9%			-7%	
Storage Length (ft)	0		0	520		350	105		0	0		140
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	145			145			100			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.97
Frt						0.850						0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	0	0	0	1633	1638	1583	1488	3064	0	0	3593	1548
Flt Permitted				0.950	0.953		0.155					
Satd. Flow (perm)	0	0	0	1633	1638	1583	243	3064	0	0	3593	1506
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						200						376
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		580			846			504			781	
Travel Time (s)		13.2			19.2			11.5			17.8	
Confl. Peds. (#/hr)							3					3
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%	0%	5%	3%	2%	12%	5%	0%	0%	4%	8%
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	424	427	471	399	622	0	0	888	436
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2					6
Detector Phase				8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Minimum Split (s)				15.0	15.0	15.0	15.0	15.0			15.0	15.0
Total Split (s)				34.0	34.0	34.0	20.0	41.0			21.0	21.0
Total Split (%)				45.3%	45.3%	45.3%	26.7%	54.7%			28.0%	28.0%
Maximum Green (s)				29.0	29.0	29.0	15.0	36.0			16.0	16.0
Yellow Time (s)				3.0	3.0	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)				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)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)				24.2	24.2	24.2	40.8	40.8			20.8	20.8
Actuated g/C Ratio				0.32	0.32	0.32	0.54	0.54			0.28	0.28
v/c Ratio				0.80	0.81	0.73	1.05	0.37			0.89	0.63
Control Delay				34.9	35.1	19.0	72.7	4.2			46.2	19.8
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				34.9	35.1	19.0	72.7	4.2			46.2	19.8
LOS				C	D	B	E	A			D	B
Approach Delay					29.3			31.0			37.5	
Approach LOS					C			C			D	
Queue Length 50th (ft)				182	183	105	~162	46			237	102
Queue Length 95th (ft)				272	274	195	#315	16			#393	m169
Internal Link Dist (ft)		500			766			424			701	
Turn Bay Length (ft)				520		350	105					140
Base Capacity (vph)				631	633	734	381	1664			994	689
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				0.67	0.67	0.64	1.05	0.37			0.89	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 32 (43%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 118.6%		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.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 40: North Airmont Road (CR 89) & I-87 NB/I-287 WB Off-Ramp



HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	2	31	59	2	62	40	1268	68	67	1441	11
Future Volume (vph)	66	2	31	59	2	62	40	1268	68	67	1441	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	14	14	14	14	14	10	11	11	10	11	11
Grade (%)		0%			0%			0%			-4%	
Storage Length (ft)	0		0	0		0	130		0	155		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.957			0.932			0.992			0.999	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1784	0	0	1845	0	1589	3275	0	1718	3388	0
Flt Permitted		0.703			0.820		0.093			0.099		
Satd. Flow (perm)	0	1295	0	0	1549	0	156	3275	0	179	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			66			9			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		182			462			185			144	
Travel Time (s)		4.1			10.5			4.2			3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	0%	4%	0%	0%	0%	6%	6%	0%	0%	5%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	133	0	43	1452	0	73	1578	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	14.0		14.0	14.0	
Total Split (s)	24.0	24.0		24.0	24.0		15.0	36.0		15.0	36.0	
Total Split (%)	32.0%	32.0%		32.0%	32.0%		20.0%	48.0%		20.0%	48.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		11.0	32.0		11.0	32.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		12.7			12.7		53.8	46.5		54.8	49.5	
Actuated g/C Ratio		0.17			0.17		0.72	0.62		0.73	0.66	
v/c Ratio		0.44			0.42		0.14	0.71		0.22	0.71	
Control Delay		26.0			18.7		4.8	16.9		8.3	12.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.0			18.7		4.8	16.9		8.3	12.6	
LOS		C			B		A	B		A	B	
Approach Delay		26.0			18.7			16.5			12.4	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)		33			28		4	267		8	167	
Queue Length 95th (ft)		73			71		15	#478		m29	#506	
Internal Link Dist (ft)		102			382			105			64	
Turn Bay Length (ft)							130			155		
Base Capacity (vph)		367			461		323	2035		357	2235	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.29			0.29		0.13	0.71		0.20	0.71	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 72 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.9 Intersection LOS: B

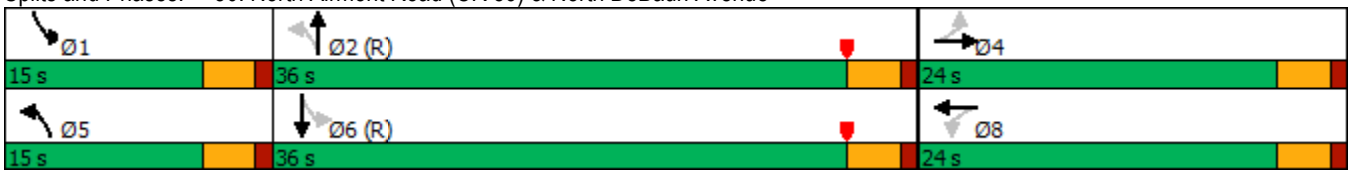
Intersection Capacity Utilization 66.8% ICU Level of Service C

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: 50: North Airmont Road (CR 89) & North DeBaun Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	2	31	59	2	62	40	1268	68	67	1441	11
Future Volume (veh/h)	66	2	31	59	2	62	40	1268	68	67	1441	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1884	1976	1914	1976	1976	1976	1811	1811	1900	2057	1982	2057
Adj Flow Rate, veh/h	72	2	34	64	2	67	43	1378	74	73	1566	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	4	0	0	0	6	6	0	0	5	0
Cap, veh/h	212	21	70	161	21	113	349	2004	107	430	2408	18
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.60	0.60	0.10	0.63	0.63
Sat Flow, veh/h	994	156	528	679	161	853	1725	3322	178	1959	3831	29
Grp Volume(v), veh/h	108	0	0	133	0	0	43	712	740	73	769	809
Grp Sat Flow(s),veh/h/ln	1678	0	0	1692	0	0	1725	1721	1779	1959	1883	1977
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.6	21.0	21.2	0.8	19.2	19.3
Cycle Q Clear(g_c), s	4.0	0.0	0.0	5.1	0.0	0.0	0.6	21.0	21.2	0.8	19.2	19.3
Prop In Lane	0.67		0.31	0.48		0.50	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	302	0	0	295	0	0	349	1038	1073	430	1184	1243
V/C Ratio(X)	0.36	0.00	0.00	0.45	0.00	0.00	0.12	0.69	0.69	0.17	0.65	0.65
Avail Cap(c_a), veh/h	502	0	0	505	0	0	466	1038	1073	513	1184	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	0.0	30.4	0.0	0.0	6.2	10.1	10.1	7.0	8.7	8.8
Incr Delay (d2), s/veh	2.6	0.0	0.0	3.9	0.0	0.0	0.6	3.7	3.6	0.7	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	4.5	0.0	0.0	0.4	12.1	12.5	0.6	11.6	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	34.3	0.0	0.0	6.8	13.8	13.7	7.7	11.5	11.4
LnGrp LOS	C	A	A	C	A	A	A	B	B	A	B	B
Approach Vol, veh/h		108			133			1495			1651	
Approach Delay, s/veh		32.5			34.3			13.5			11.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	49.3		13.9	9.9	51.1		13.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	32.0		20.0	11.0	32.0		20.0				
Max Q Clear Time (g_c+I1), s	2.8	23.2		6.0	2.6	21.3		7.1				
Green Ext Time (p_c), s	0.2	8.1		0.9	0.1	10.0		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.9	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	867	18	171	856	23	113
Future Vol, veh/h	867	18	171	856	23	113
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	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-4	-	-	2	-4	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	6	7	6	6	0	7
Mvmt Flow	922	19	182	911	24	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	941	0	2207	932
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	1275	-
Critical Hdwy	-	-	4.16	-	5.6	5.87
Critical Hdwy Stg 1	-	-	-	-	4.6	-
Critical Hdwy Stg 2	-	-	-	-	4.6	-
Follow-up Hdwy	-	-	2.254	-	3.5	3.363
Pot Cap-1 Maneuver	-	-	712	-	81	351
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	712	-	60	351
Mov Cap-2 Maneuver	-	-	-	-	179	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	262	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	27.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	302	-	-	712	-
HCM Lane V/C Ratio	0.479	-	-	0.255	-
HCM Control Delay (s)	27.4	-	-	11.8	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.5	-	-	1	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	20	483	534	0
Future Vol, veh/h	0	20	20	483	534	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	-6	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	100	100	5	6	0
Mvmt Flow	0	23	23	555	614	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1215	614	614	0	-	0
Stage 1	614	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Critical Hdwy	6.2	7.1	5.1	-	-	-
Critical Hdwy Stg 1	5.2	-	-	-	-	-
Critical Hdwy Stg 2	5.2	-	-	-	-	-
Follow-up Hdwy	3.5	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	216	358	627	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	205	358	627	-	-	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.7	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	627	-	358	-	-
HCM Lane V/C Ratio	0.037	-	0.064	-	-
HCM Control Delay (s)	11	0	15.7	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-