

Attachment 1

NYS Route 17M/US Route 6 and I-84 WB Off Ramp/NYS Route 17M Intersections

- Level of Service Comparison Table
- Synchro Analysis

Table No. C-1R
Level of Service Summary Table
Weekday Peak AM Hour
Sensitivity Analysis

	2026 No-Build Sensitivity Analysis			2026 Build Sensitivity Analysis			2026 Build w/ Improvements Sensitivity Analysis			Change in Delay No-Build to Build Sensitivity			
	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay				
11	U.S. Route 6 & NYS Route 17M		Signalized										
	U.S. Route 6	EB	LT	1.15	F	148.5	-	-	-	-	-		
			R	0.00	A	0.0	-	-	-	-	-		
		EB Overall		-	F	148.5	-	-	-	-	-		
	Sunrise Park Road	WB	LTR	0.58	E	74.5	-	-	-	-	-		
	NYS Route 17M	NB	L	1.07	F	95.5	-	-	-	-	-		
			T	0.66	B	14.9	-	-	-	-	-		
			TR	0.66	B	14.9	-	-	-	-	-		
		NB Overall		-	C	34.7	-	-	-	-	-		
	NYS Route 17M	SB	L	0.11	C	27.1	-	-	-	-	-		
			T, T	0.94	D	51.0	-	-	-	-	-		
			R	0.00	A	0.0	-	-	-	-	-		
		SB Overall		-	D	50.7	-	-	-	-	-		
		Overall		-	D	50.8	-	-	-	-	-		
	W/ NB Double Left Turn Lane & EB Double Left Turn Lane		Signalized										
	U.S. Route 6	EB	L, LT	-	-	-	1.17	F	155.8	0.83	D	50.3	-98.2
			R	-	-	-	0.00	A	0.0	0.00	A	0.0	0.0
		EB Overall		-	-	-	-	F	155.8	-	D	50.3	-98.2
	Sunrise Park Road	WB	LTR	-	-	-	0.58	E	64.5	0.55	D	54.3	-20.2
	NYS Route 17M	NB	L, L	-	-	-	1.27	F	172.6	0.75	D	37.6	-57.9
			T	-	-	-	0.66	B	14.9	0.72	B	18.0	3.1
			TR	-	-	-	0.11	B	14.9	0.73	B	18.0	3.1
		NB Overall		-	-	-	-	E	59.0	-	C	23.5	-11.2
	NYS Route 17M	SB	L	-	-	-	0.11	C	27.1	0.84	F	101.6	74.5
			T, T	-	-	-	0.94	D	51.0	0.94	D	44.0	-7.0
			R	-	-	-	0.00	D	0.0	0.00	A	0.0	0.0
		SB Overall		-	-	-	-	D	50.7	-	D	44.9	-5.8
		Overall		-	-	-	-	E	65.4	-	C	32.9	-17.9
12a	I-84 WB Off-Ramp to NYS 17M WB		Unsignalized										
	I-84 WB Off-Ramp	WB	R	1.93	F	450.4	2.09	F	524.9	-	-	-	-
	W/ Signalization & Two Lane Off Ramp		Signalized										
	I-84 WB Off Ramp	WB	R, R	-	-	-	-	-	-	0.79	C	33.9	-416.5
	NYS Route 17M	NB	T, T	-	-	-	-	-	-	0.76	C	23.0	-
		Overall		-	-	-	-	-	-	-	B	15.8	-

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

Table No. C-1R
Level of Service Summary Table
Weekday Peak PM Hour
Sensitivity Analysis






















	2026 No-Build Sensitivity Analysis			2026 Build Sensitivity Analysis			2026 Build w/ Improvements Sensitivity Analysis			Change in Delay No-Build to Build Sensitivity			
	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay				
11	U.S. Route 6 & NYS Route 17M		Signalized										
	U.S. Route 6	EB	LT	1.68	F	370.4	-	-	-	-	-		
			R	0.00	A	0.0	-	-	-	-	-		
		EB Overall		-	F	370.4	-	-	-	-	-		
	Sunrise Park Road	WB	LTR	0.79	E	64.9	-	-	-	-	-		
	NYS Route 17M	NB	L	1.01	F	80.1	-	-	-	-	-		
			T	0.53	B	14.1	-	-	-	-	-		
			TR	0.53	B	14.0	-	-	-	-	-		
		NB Overall		-	C	31.4	-	-	-	-	-		
	NYS Route 17M	SB	L	0.09	C	26.1	-	-	-	-	-		
			T, T	0.98	E	57.3	-	-	-	-	-		
			R	0.00	A	0.0	-	-	-	-	-		
		SB Overall		-	E	56.8	-	-	-	-	-		
		Overall		-	F	88.5	-	-	-	-	-		
	W/ NB Double Left Turn Lane & EB Double Left Turn Lane		Signalized										
	U.S. Route 6	EB	L, LT	-	-	-	1.81	F	425.5	0.87	D	52.0	-318.4
			R	-	-	-	0.00	A	0.0	0.00	A	0.0	0.0
		EB Overall		-	-	-	-	F	425.5	-	D	52.0	-318.4
	Sunrise Park Road	WB	LTR	-	-	-	0.80	E	57.9	0.80	E	73.1	8.2
	NYS Route 17M	NB	L, L	-	-	-	1.07	F	99.3	0.84	D	51.0	-29.1
			T	-	-	-	0.53	B	14.1	0.64	C	20.6	6.5
			TR	-	-	-	0.53	B	14.0	0.64	C	20.5	6.5
		NB Overall		-	-	-	-	D	37.3	-	C	28.8	-2.6
	NYS Route 17M	SB	L	-	-	-	0.09	C	26.1	0.86	F	103.3	77.2
			T, T	-	-	-	0.98	E	57.1	0.95	D	44.4	-12.9
			R	-	-	-	0.00	A	0.0	0.00	A	0.0	0.0
		SB Overall		-	-	-	-	E	56.6	-	D	45.4	-11.4
		Overall		-	-	-	-	F	101.7	-	D	39.1	-49.4
12a	I-84 WB Off-Ramp to NYS 17M WB		Unsignalized										
	I-84 WB Off-Ramp	WB	R	1.22	F	144.4	1.27	F	162.8	-	-	-	-
	W/ Signalization & Two Lane Off Ramp		Signalized										
	I-84 WB Off Ramp	WB	R, R	-	-	-	-	-	-	0.79	C	34.7	-109.7
	NYS Route 17M	NB	T, T	-	-	-	-	-	-	0.50	B	12.2	-
		Overall		-	-	-	-	-	-	-	B	10.0	-

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 10/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	294	7	385	9	0	6	453	1350	39	16	1027	363
Future Volume (vph)	294	7	385	9	0	6	453	1350	39	16	1027	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	0		0	0		0	525		0	100		0
Storage Lanes	0		1	0		0	1		0	1		1
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	1.00
Frt			0.850		0.944			0.996				0.850
Flt Protected		0.953			0.971		0.950			0.950		
Satd. Flow (prot)	0	1743	1455	0	1603	0	1605	3508	0	1805	3505	1599
Flt Permitted		0.953			0.971		0.081			0.154		
Satd. Flow (perm)	0	1743	1455	0	1603	0	137	3508	0	293	3505	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			441		121			4				289
Link Speed (mph)		55			45			45				45
Link Distance (ft)		319			392			755				645
Travel Time (s)		4.0			5.9			11.4				9.8
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	4%	0%	11%	11%	0%	0%	13%	3%	3%	0%	3%	1%
Adj. Flow (vph)	342	8	448	10	0	7	527	1570	45	19	1194	422
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	350	448	0	17	0	527	1615	0	19	1194	422
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	2	2		2	2		2	2	2
Detector Template				Left								
Leading Detector (ft)	20	83	83	83	83		83	83		83	83	83
Trailing Detector (ft)	0	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	0	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	20	40	40	40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		43	43	43	43		43	43		43	43	43
Detector 2 Size(ft)		40	40	40	40		40	40		40	40	40
Detector 2 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	Perm

2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 10/18/2023

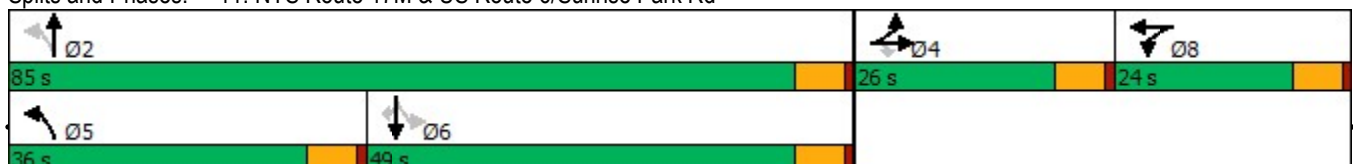


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases			4				2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		11.0	24.0		24.0	24.0	24.0
Total Split (s)	26.0	26.0	26.0	24.0	24.0		36.0	85.0		49.0	49.0	49.0
Total Split (%)	19.3%	19.3%	19.3%	17.8%	17.8%		26.7%	63.0%		36.3%	36.3%	36.3%
Maximum Green (s)	20.0	20.0	20.0	18.0	18.0		30.0	79.0		43.0	43.0	43.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
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
Total Lost Time (s)		6.0	6.0		6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							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	Max		Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0			11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0		0	0	0
v/c Ratio		1.16	0.73		0.09		1.11	0.67		0.17	0.91	0.54
Control Delay		145.0	12.3		0.9		107.3	13.1		31.7	46.8	12.0
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		145.0	12.3		0.9		107.3	13.1		31.7	46.8	12.0
Queue Length 50th (ft)		~287	4		0		~370	283		9	410	63
Queue Length 95th (ft)		#498	86		0		#627	449		31	#586	157
Internal Link Dist (ft)		239			312			675			565	
Turn Bay Length (ft)							525			100		
Base Capacity (vph)		302	616		352		475	2403		109	1306	777
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		1.16	0.73		0.05		1.11	0.67		0.17	0.91	0.54

Intersection Summary

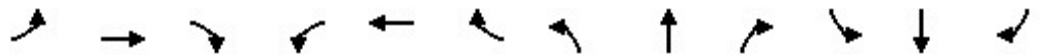
Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 115.6
 Natural Cycle: 145
 Control Type: Actuated-Uncoordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 10/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↕		↗	↕	↗
Traffic Volume (veh/h)	294	7	385	9	0	6	453	1350	39	16	1027	363
Future Volume (veh/h)	294	7	385	9	0	6	453	1350	39	16	1027	363
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	1841	1900	1737	1643	1806	1806	1744	1894	1894	1900	1856	1885
Adj Flow Rate, veh/h	342	8	0	10	0	7	527	1570	45	19	1194	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	0	11	11	0	0	13	3	3	0	3	1
Cap, veh/h	297	7		17	0	12	493	2369	68	175	1272	
Arrive On Green	0.17	0.17	0.00	0.02	0.00	0.02	0.25	0.66	0.66	0.36	0.36	0.00
Sat Flow, veh/h	1770	41	1472	963	0	674	1661	3573	102	318	3526	1598
Grp Volume(v), veh/h	350	0	0	17	0	0	527	789	826	19	1194	0
Grp Sat Flow(s),veh/h/ln	1811	0	1472	1636	0	0	1661	1800	1876	318	1763	1598
Q Serve(g_s), s	20.0	0.0	0.0	1.2	0.0	0.0	30.0	31.3	31.6	4.8	39.0	0.0
Cycle Q Clear(g_c), s	20.0	0.0	0.0	1.2	0.0	0.0	30.0	31.3	31.6	4.8	39.0	0.0
Prop In Lane	0.98		1.00	0.59		0.41	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	304	0		30	0	0	493	1193	1244	175	1272	
V/C Ratio(X)	1.15	0.00		0.58	0.00	0.00	1.07	0.66	0.66	0.11	0.94	
Avail Cap(c_a), veh/h	304	0		247	0	0	493	1193	1244	175	1272	
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	0.00
Uniform Delay (d), s/veh	49.6	0.0	0.0	58.0	0.0	0.0	35.5	12.0	12.1	25.9	36.8	0.0
Incr Delay (d2), s/veh	99.0	0.0	0.0	16.4	0.0	0.0	59.9	2.9	2.8	1.2	14.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.0	0.0	0.0	0.6	0.0	0.0	16.7	11.6	12.2	0.4	18.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	148.5	0.0	0.0	74.5	0.0	0.0	95.5	14.9	14.9	27.1	51.0	0.0
LnGrp LOS	F	A		E	A	A	F	B	B	C	D	
Approach Vol, veh/h		350	A		17			2142			1213	A
Approach Delay, s/veh		148.5			74.5			34.7			50.7	
Approach LOS		F			E			C			D	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		85.0		26.0	36.0	49.0		8.2				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		79.0		20.0	30.0	43.0		18.0				
Max Q Clear Time (g_c+I1), s		33.6		22.0	32.0	41.0		3.2				
Green Ext Time (p_c), s		13.6		0.0	0.0	1.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			50.8									
HCM 6th LOS			D									
Notes												
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

2026 No-Build Traffic Volumes
 12: WB On Ramp & NYS Route 17M & WB Off Ramp

AM Peak Hour
 10/18/2023



Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations		↗		↑↑			↑↑	↗		
Traffic Volume (vph)	0	618	0	1223	0	0	1320	101	0	0
Future Volume (vph)	0	618	0	1223	0	0	1320	101	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.865						0.850		
Flt Protected										
Satd. Flow (prot)	0	1638	0	3406	0	0	3471	1369	0	0
Flt Permitted										
Satd. Flow (perm)	0	1638	0	3406	0	0	3471	1369	0	0
Link Speed (mph)	30			45			45		30	
Link Distance (ft)	567			429			228		250	
Travel Time (s)	12.9			6.5			3.5		5.7	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	7%	0%	6%	0%	0%	4%	18%	0%	0%
Adj. Flow (vph)	0	710	0	1406	0	0	1517	116	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	710	0	1406	0	0	1517	116	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right
Median Width(ft)	0			0			0		0	
Link Offset(ft)	0			0			0		0	
Crosswalk Width(ft)	16			16			16		16	
Two way Left Turn Lane										
Headway Factor	1.00	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	9
Sign Control	Stop			Free			Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2026 No-Build Traffic Volumes
 12: WB On Ramp & NYS Route 17M & WB Off Ramp

AM Peak Hour
 10/18/2023

Intersection										
Int Delay, s/veh	85.3									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations		↗		↕			↕	↗		
Traffic Vol, veh/h	0	618	0	1223	0	0	1320	101	0	0
Future Vol, veh/h	0	618	0	1223	0	0	1320	101	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	-	0	-	-	-	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	7	0	6	0	0	4	18	0	0
Mvmt Flow	0	710	0	1406	0	0	1517	116	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	703	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.04	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.37	-
Pot Cap-1 Maneuver	0 ~ 369	0	0
Stage 1	0	0	0
Stage 2	0	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	- ~ 369	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	450.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT	SBR
Capacity (veh/h)	- 369	-	-
HCM Lane V/C Ratio	- 1.925	-	-
HCM Control Delay (s)	- \$ 450.4	-	-
HCM Lane LOS	- F	-	-
HCM 95th %tile Q(veh)	- 48.2	-	-

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

2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 10/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↕↔		↖	↕↕	↗
Traffic Volume (vph)	450	16	478	31	16	35	421	1159	21	19	1178	422
Future Volume (vph)	450	16	478	31	16	35	421	1159	21	19	1178	422
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	0		0	0		0	525		0	100		0
Storage Lanes	0		1	0		0	1		0	1		1
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	1.00
Frt			0.850		0.942			0.997				0.850
Flt Protected		0.954			0.981		0.950			0.950		
Satd. Flow (prot)	0	1778	1417	0	1659	0	1605	3511	0	1719	3539	1583
Flt Permitted		0.954			0.981		0.087			0.231		
Satd. Flow (perm)	0	1778	1417	0	1659	0	147	3511	0	418	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			380		25			2				317
Link Speed (mph)		55			45			45				45
Link Distance (ft)		319			392			755				645
Travel Time (s)		4.0			5.9			11.4				9.8
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 (%)	2%	0%	14%	3%	0%	6%	13%	3%	5%	5%	2%	2%
Adj. Flow (vph)	464	16	493	32	16	36	434	1195	22	20	1214	435
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	480	493	0	84	0	434	1217	0	20	1214	435
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	2	2	2		2	2		2	2	2
Detector Template				Left								
Leading Detector (ft)	20	83	83	83	83		83	83		83	83	83
Trailing Detector (ft)	0	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	0	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	20	40	40	40	40		40	40		40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		43	43	43	43		43	43		43	43	43
Detector 2 Size(ft)		40	40	40	40		40	40		40	40	40
Detector 2 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	Perm

2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 10/18/2023

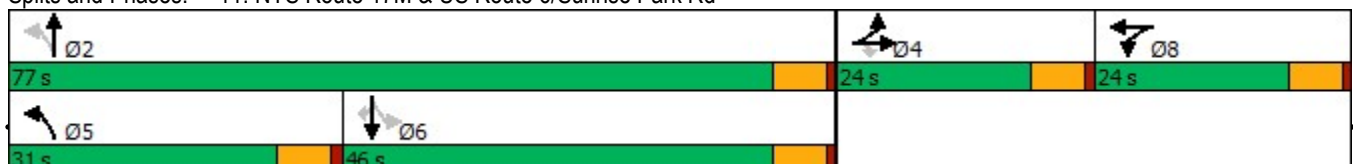


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases			4				2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		11.0	24.0		24.0	24.0	24.0
Total Split (s)	24.0	24.0	24.0	24.0	24.0		31.0	77.0		46.0	46.0	46.0
Total Split (%)	19.2%	19.2%	19.2%	19.2%	19.2%		24.8%	61.6%		36.8%	36.8%	36.8%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		25.0	71.0		40.0	40.0	40.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
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
Total Lost Time (s)		6.0	6.0		6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							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	Max		Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	0
v/c Ratio		1.71	0.91		0.52		1.06	0.56		0.14	0.98	0.57
Control Delay		366.0	34.2		48.5		93.9	14.5		30.9	58.5	12.0
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		366.0	34.2		48.5		93.9	14.5		30.9	58.5	12.0
Queue Length 50th (ft)		~536	87		43		~318	269		10	476	63
Queue Length 95th (ft)		#776	#310		94		#554	366		32	#677	176
Internal Link Dist (ft)		239			312			675			565	
Turn Bay Length (ft)							525			100		
Base Capacity (vph)		280	543		283		411	2188		146	1242	761
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		1.71	0.91		0.30		1.06	0.56		0.14	0.98	0.57

Intersection Summary

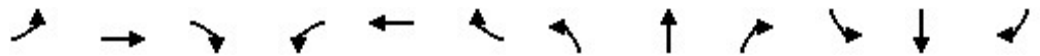
Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 114.4
 Natural Cycle: 145
 Control Type: Actuated-Uncoordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 No-Build Traffic Volumes
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 10/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↕↔		↖	↕↕	↗
Traffic Volume (veh/h)	450	16	478	31	16	35	421	1159	21	19	1178	422
Future Volume (veh/h)	450	16	478	31	16	35	421	1159	21	19	1178	422
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	1870	1900	1693	1761	1806	1717	1744	1894	1864	1826	1870	1870
Adj Flow Rate, veh/h	464	16	0	32	16	36	434	1195	22	20	1214	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	14	3	0	6	13	3	5	5	2	2
Cap, veh/h	276	10		40	20	46	431	2244	41	220	1243	
Arrive On Green	0.16	0.16	0.00	0.06	0.06	0.06	0.22	0.62	0.62	0.35	0.35	0.00
Sat Flow, veh/h	1752	60	1434	628	314	706	1661	3615	67	448	3554	1585
Grp Volume(v), veh/h	480	0	0	84	0	0	434	595	622	20	1214	0
Grp Sat Flow(s),veh/h/ln	1812	0	1434	1647	0	0	1661	1800	1882	448	1777	1585
Q Serve(g_s), s	18.0	0.0	0.0	5.7	0.0	0.0	25.0	21.4	21.4	3.5	38.6	0.0
Cycle Q Clear(g_c), s	18.0	0.0	0.0	5.7	0.0	0.0	25.0	21.4	21.4	3.5	38.6	0.0
Prop In Lane	0.97		1.00	0.38		0.43	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	285	0		106	0	0	431	1117	1168	220	1243	
V/C Ratio(X)	1.68	0.00		0.79	0.00	0.00	1.01	0.53	0.53	0.09	0.98	
Avail Cap(c_a), veh/h	285	0		259	0	0	431	1117	1168	220	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	0.00
Uniform Delay (d), s/veh	48.2	0.0	0.0	52.7	0.0	0.0	35.2	12.3	12.3	25.3	36.7	0.0
Incr Delay (d2), s/veh	322.2	0.0	0.0	12.2	0.0	0.0	44.9	1.8	1.7	0.8	20.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.2	0.0	0.0	2.7	0.0	0.0	12.1	8.1	8.5	0.4	19.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	370.4	0.0	0.0	64.9	0.0	0.0	80.1	14.1	14.0	26.1	57.3	0.0
LnGrp LOS	F	A		E	A	A	F	B	B	C	E	
Approach Vol, veh/h		480	A		84			1651			1234	A
Approach Delay, s/veh		370.4			64.9			31.4			56.8	
Approach LOS		F			E			C			E	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		77.0		24.0	31.0	46.0		13.4				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		71.0		18.0	25.0	40.0		18.0				
Max Q Clear Time (g_c+I1), s		23.4		20.0	27.0	40.6		7.7				
Green Ext Time (p_c), s		8.2		0.0	0.0	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	88.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

2026 No-Build Traffic Volumes
 12: WB On Ramp & NYS Route 17M & WB Off Ramp

PM Peak Hour
 10/18/2023



Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations		↗		↑↑			↑↑	↗		
Traffic Volume (vph)	0	576	0	1024	0	0	1376	311	0	0
Future Volume (vph)	0	576	0	1024	0	0	1376	311	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt		0.865						0.850		
Flt Protected										
Satd. Flow (prot)	0	1654	0	3406	0	0	3406	1468	0	0
Flt Permitted										
Satd. Flow (perm)	0	1654	0	3406	0	0	3406	1468	0	0
Link Speed (mph)	30			45			45		30	
Link Distance (ft)	567			429			228		250	
Travel Time (s)	12.9			6.5			3.5		5.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	6%	0%	6%	0%	0%	6%	10%	0%	0%
Adj. Flow (vph)	0	594	0	1056	0	0	1419	321	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	594	0	1056	0	0	1419	321	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right
Median Width(ft)	0			0			0		0	
Link Offset(ft)	0			0			0		0	
Crosswalk Width(ft)	16			16			16		16	
Two way Left Turn Lane										
Headway Factor	1.00	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	9
Sign Control	Stop			Free			Free		Free	

Intersection Summary

Area Type: Other
 Control Type: Unsignalized

2026 No-Build Traffic Volumes
 12: WB On Ramp & NYS Route 17M & WB Off Ramp

PM Peak Hour
 10/18/2023

Intersection										
Int Delay, s/veh	25.3									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations		↗		↕			↕	↗		
Traffic Vol, veh/h	0	576	0	1024	0	0	1376	311	0	0
Future Vol, veh/h	0	576	0	1024	0	0	1376	311	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	-	0	-	-	-	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	6	0	6	0	0	6	10	0	0
Mvmt Flow	0	594	0	1056	0	0	1419	321	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	528	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.02	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.36	-
Pot Cap-1 Maneuver	0 ~ 485	0	0
Stage 1	0	0	0
Stage 2	0	0	0
Platoon blocked, %			
Mov Cap-1 Maneuver	- ~ 485	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

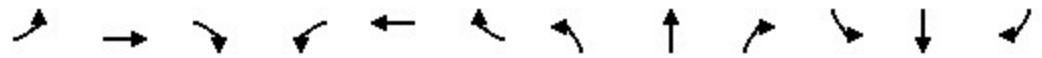
Approach	WB	NB	SB
HCM Control Delay, s	144.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT	SBR
Capacity (veh/h)	- 485	-	-
HCM Lane V/C Ratio	- 1.224	-	-
HCM Control Delay (s)	- 144.4	-	-
HCM Lane LOS	- F	-	-
HCM 95th %tile Q(veh)	- 23.2	-	-

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

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 04/09/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗		↗	↕↕	↗
Traffic Volume (vph)	299	7	398	9	0	6	539	1350	39	16	1027	405
Future Volume (vph)	299	7	398	9	0	6	539	1350	39	16	1027	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	310		250	0		0	475		0	100		0
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	50			25			50			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	1.00
Frt			0.850		0.944			0.996				0.850
Flt Protected		0.953			0.971		0.950			0.950		
Satd. Flow (prot)	0	1726	1455	0	1603	0	1605	3508	0	1805	3505	1599
Flt Permitted		0.953			0.971		0.081			0.154		
Satd. Flow (perm)	0	1726	1455	0	1603	0	137	3508	0	293	3505	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			448		121			4				323
Link Speed (mph)		55			45			45				45
Link Distance (ft)		767			504			609				892
Travel Time (s)		9.5			7.6			9.2				13.5
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	5%	0%	11%	11%	0%	0%	13%	3%	3%	0%	3%	1%
Adj. Flow (vph)	348	8	463	10	0	7	627	1570	45	19	1194	471
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	356	463	0	17	0	627	1615	0	19	1194	471
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			45			25	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		25	15		9	15		9	15		15
Number of Detectors	2	2	2	2	2		2	2		1	2	2
Detector Template				Left								
Leading Detector (ft)	83	83	83	83	83		83	83		15	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	43
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	Perm

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 04/09/2024

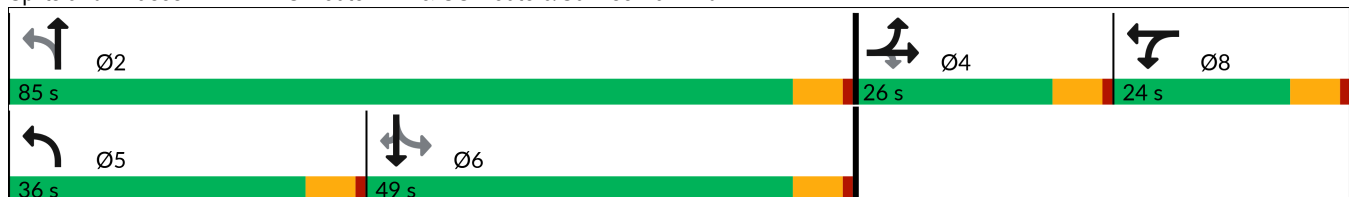


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases			4				2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		11.0	24.0		24.0	24.0	24.0
Total Split (s)	26.0	26.0	26.0	24.0	24.0		36.0	85.0		49.0	49.0	49.0
Total Split (%)	19.3%	19.3%	19.3%	17.8%	17.8%		26.7%	63.0%		36.3%	36.3%	36.3%
Maximum Green (s)	20.0	20.0	20.0	18.0	18.0		30.0	79.0		43.0	43.0	43.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
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
Total Lost Time (s)		6.0	6.0		6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							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	None	None	None	None		None	Max		Max	Max	Max
v/c Ratio		1.19	0.74		0.09		1.31	0.67		0.17	0.91	0.58
Control Delay (s/veh)		156.2	13.2		1.0		187.1	12.9		31.4	46.5	12.4
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		156.2	13.2		1.0		187.1	12.9		31.4	46.5	12.4
Queue Length 50th (ft)		~298	9		0		~522	283		9	410	71
Queue Length 95th (ft)		#509	95		0		#793	444		31	#582	176
Internal Link Dist (ft)		687			424		529				812	
Turn Bay Length (ft)			250				475			100		
Base Capacity (vph)		299	623		352		476	2407		109	1308	799
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		1.19	0.74		0.05		1.32	0.67		0.17	0.91	0.59

Intersection Summary

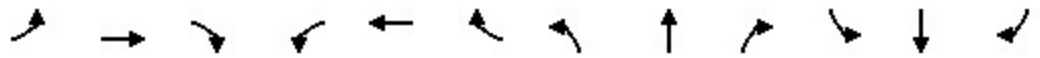
Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 115.4
 Natural Cycle: 145
 Control Type: Semi Act-Uncoord
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 04/09/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	299	7	398	9	0	6	539	1350	39	16	1027	405
Future Volume (veh/h)	299	7	398	9	0	6	539	1350	39	16	1027	405
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	1826	1900	1737	1643	1806	1806	1744	1894	1894	1900	1856	1885
Adj Flow Rate, veh/h	348	8	0	10	0	7	627	1570	45	19	1194	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	0	11	11	0	0	13	3	3	0	3	1
Cap, veh/h	297	7		17	0	12	493	2369	68	175	1272	
Arrive On Green	0.17	0.17	0.00	0.02	0.00	0.02	0.25	0.66	0.66	0.36	0.36	0.00
Sat Flow, veh/h	1771	41	1472	963	0	674	1661	3573	102	318	3526	1598
Grp Volume(v), veh/h	356	0	0	17	0	0	627	789	826	19	1194	0
Grp Sat Flow(s),veh/h/ln	1811	0	1472	1636	0	0	1661	1800	1876	318	1763	1598
Q Serve(g_s), s	20.0	0.0	0.0	1.2	0.0	0.0	30.0	31.3	31.6	4.8	39.0	0.0
Cycle Q Clear(g_c), s	20.0	0.0	0.0	1.2	0.0	0.0	30.0	31.3	31.6	4.8	39.0	0.0
Prop In Lane	0.98		1.00	0.59		0.41	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	304	0		30	0	0	493	1193	1244	175	1272	
V/C Ratio(X)	1.17	0.00		0.58	0.00	0.00	1.27	0.66	0.66	0.11	0.94	
Avail Cap(c_a), veh/h	304	0		247	0	0	493	1193	1244	175	1272	
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	0.00
Uniform Delay (d), s/veh	49.6	0.0	0.0	58.0	0.0	0.0	35.5	12.0	12.1	25.9	36.8	0.0
Incr Delay (d2), s/veh	106.2	0.0	0.0	6.4	0.0	0.0	137.1	2.9	2.8	1.2	14.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	0.0	0.0	0.5	0.0	0.0	27.3	11.6	12.2	0.4	18.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	155.8	0.0	0.0	64.5	0.0	0.0	172.6	14.9	14.9	27.1	51.0	0.0
LnGrp LOS	F			E			F	B	B	C	D	
Approach Vol, veh/h		356			17			2242			1213	
Approach Delay, s/veh		155.8			64.5			59.0			50.7	
Approach LOS		F			E			E			D	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		85.0		26.0	36.0	49.0		8.2				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		79.0		20.0	30.0	43.0		18.0				
Max Q Clear Time (g_c+I1), s		33.6		22.0	32.0	41.0		3.2				
Green Ext Time (p_c), s		6.8		0.0	0.0	1.1		0.0				

Intersection Summary

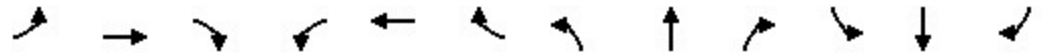
HCM 6th Ctrl Delay, s/veh	65.4
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
 Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

AM Peak Hour
 04/09/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↕			↕	↗
Traffic Volume (vph)	0	0	0	0	0	674	0	1254	0	0	1325	109
Future Volume (vph)	0	0	0	0	0	674	0	1254	0	0	1325	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Fr _t						0.865						0.850
Fl _t Protected												
Satd. Flow (prot)	0	0	0	0	0	1611	0	3539	0	0	3539	1583
Fl _t Permitted												
Satd. Flow (perm)	0	0	0	0	0	1611	0	3539	0	0	3539	1583
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		757			706			656			322	
Travel Time (s)		17.2			16.0			9.9			4.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	0	0	775	0	1441	0	0	1523	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	775	0	1441	0	0	1523	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			18	
Link Offset(ft)		-20			-35			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		30
Sign Control		Free			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

AM Peak Hour
 04/09/2024

Intersection												
Int Delay, s/veh	105.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↗↗			↗↗	↗
Traffic Vol, veh/h	0	0	0	0	0	674	0	1254	0	0	1325	109
Future Vol, veh/h	0	0	0	0	0	674	0	1254	0	0	1325	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	775	0	1441	0	0	1523	125

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	721
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	0	~ 370
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	0	~ 370
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

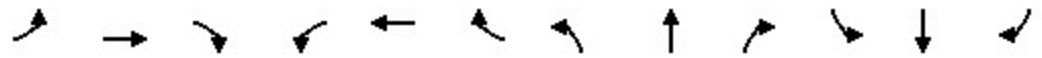
Approach	WB	NB	SB
HCM Control Delay, s/v	\$ 524.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT	SBR
Capacity (veh/h)	- 370	-	-
HCM Lane V/C Ratio	- 2.094	-	-
HCM Control Delay (s/veh)	- \$ 524.9	-	-
HCM Lane LOS	- F	-	-
HCM 95th %tile Q (veh)	- 55.8	-	-

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

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

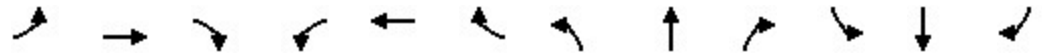
PM Peak Hour
 04/09/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕↖		↖	↕↕	↗
Traffic Volume (vph)	485	16	556	31	16	35	442	1159	21	19	1178	430
Future Volume (vph)	485	16	556	31	16	35	442	1159	21	19	1178	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	310		250	0		0	475		0	100		0
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	50			25			50			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	1.00
Frt			0.850		0.942			0.997				0.850
Flt Protected		0.954			0.981		0.950			0.950		
Satd. Flow (prot)	0	1778	1404	0	1659	0	1577	3511	0	1719	3539	1583
Flt Permitted		0.954			0.981		0.087			0.231		
Satd. Flow (perm)	0	1778	1404	0	1659	0	144	3511	0	418	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			411		25			2				323
Link Speed (mph)		55			45			45				45
Link Distance (ft)		767			504			609				892
Travel Time (s)		9.5			7.6			9.2				13.5
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 (%)	2%	0%	15%	3%	0%	6%	15%	3%	5%	5%	2%	2%
Adj. Flow (vph)	500	16	573	32	16	36	456	1195	22	20	1214	443
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	516	573	0	84	0	456	1217	0	20	1214	443
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			45			25	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		25	15		9	15		9	15		15
Number of Detectors	2	2	2	2	2		2	2		1	2	2
Detector Template			Left									
Leading Detector (ft)	83	83	83	83	83		83	83		15	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	43
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA		Perm	NA	Perm

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 04/09/2024

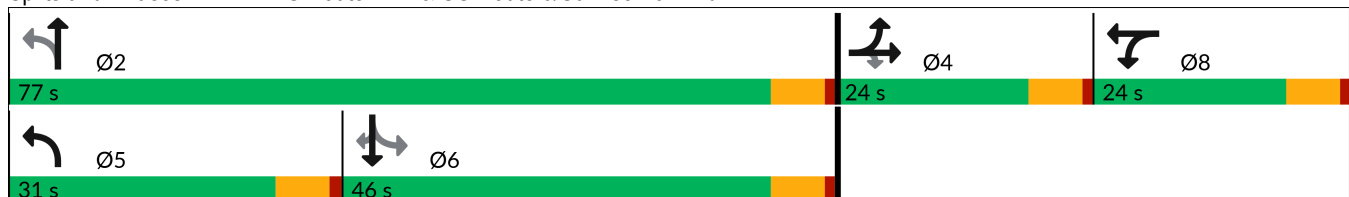


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases			4				2			6		6
Detector Phase	4	4	4	8	8		5	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		11.0	24.0		24.0	24.0	24.0
Total Split (s)	24.0	24.0	24.0	24.0	24.0		31.0	77.0		46.0	46.0	46.0
Total Split (%)	19.2%	19.2%	19.2%	19.2%	19.2%		24.8%	61.6%		36.8%	36.8%	36.8%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		25.0	71.0		40.0	40.0	40.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
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
Total Lost Time (s)		6.0	6.0		6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							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	None	None	None	None		None	Max		Max	Max	Max
v/c Ratio		1.82	1.00		0.56		1.12	0.55		0.13	0.97	0.57
Control Delay (s/veh)		415.4	54.6		51.6		115.1	14.1		30.3	56.7	11.8
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)		415.4	54.6		51.6		115.1	14.1		30.3	56.7	11.8
Queue Length 50th (ft)		~586	~155		43		~354	262		10	470	63
Queue Length 95th (ft)		#832	#406		94		#592	358		32	#668	177
Internal Link Dist (ft)		687			424			529			812	
Turn Bay Length (ft)			250				475			100		
Base Capacity (vph)		282	568		284		406	2202		147	1250	768
Starvation Cap Reductn		0	0		0		0	0		0	0	0
Spillback Cap Reductn		0	0		0		0	0		0	0	0
Storage Cap Reductn		0	0		0		0	0		0	0	0
Reduced v/c Ratio		1.83	1.01		0.30		1.12	0.55		0.14	0.97	0.58

Intersection Summary

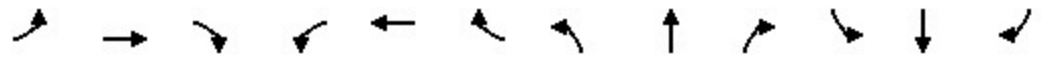
Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 113.6
 Natural Cycle: 145
 Control Type: Actuated-Uncoordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 04/09/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕		↖	↕	↗
Traffic Volume (veh/h)	485	16	556	31	16	35	442	1159	21	19	1178	430
Future Volume (veh/h)	485	16	556	31	16	35	442	1159	21	19	1178	430
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	1870	1900	1678	1761	1806	1717	1714	1894	1864	1826	1870	1870
Adj Flow Rate, veh/h	500	16	0	32	16	36	456	1195	22	20	1214	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	15	3	0	6	15	3	5	5	2	2
Cap, veh/h	276	9		40	20	45	425	2245	41	220	1243	
Arrive On Green	0.16	0.16	0.00	0.06	0.06	0.06	0.22	0.62	0.62	0.35	0.35	0.00
Sat Flow, veh/h	1756	56	1422	628	314	706	1633	3615	67	448	3554	1585
Grp Volume(v), veh/h	516	0	0	84	0	0	456	595	622	20	1214	0
Grp Sat Flow(s),veh/h/ln	1812	0	1422	1647	0	0	1633	1800	1882	448	1777	1585
Q Serve(g_s), s	18.0	0.0	0.0	5.7	0.0	0.0	25.0	21.4	21.4	3.5	38.6	0.0
Cycle Q Clear(g_c), s	18.0	0.0	0.0	5.7	0.0	0.0	25.0	21.4	21.4	3.5	38.6	0.0
Prop In Lane	0.97		1.00	0.38		0.43	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	285	0		105	0	0	425	1118	1169	220	1243	
V/C Ratio(X)	1.81	0.00		0.80	0.00	0.00	1.07	0.53	0.53	0.09	0.98	
Avail Cap(c_a), veh/h	285	0		259	0	0	425	1118	1169	220	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	0.00
Uniform Delay (d), s/veh	48.2	0.0	0.0	52.8	0.0	0.0	35.0	12.3	12.3	25.3	36.7	0.0
Incr Delay (d2), s/veh	377.4	0.0	0.0	5.1	0.0	0.0	64.3	1.8	1.7	0.8	20.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	37.6	0.0	0.0	2.5	0.0	0.0	14.2	8.1	8.4	0.4	19.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	425.5	0.0	0.0	57.9	0.0	0.0	99.3	14.1	14.0	26.1	57.1	0.0
LnGrp LOS	F			E			F	B	B	C	E	
Approach Vol, veh/h		516			84			1673			1234	
Approach Delay, s/veh		425.5			57.9			37.3			56.6	
Approach LOS		F			E			D			E	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		77.0		24.0	31.0	46.0		13.3				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		71.0		18.0	25.0	40.0		18.0				
Max Q Clear Time (g_c+I1), s		23.4		20.0	27.0	40.6		7.7				
Green Ext Time (p_c), s		4.2		0.0	0.0	0.0		0.1				

Intersection Summary

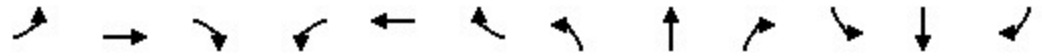
HCM 6th Ctrl Delay, s/veh	101.7
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.
 Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

PM Peak Hour
 04/09/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↕			↕	↗
Traffic Volume (vph)	0	0	0	0	0	589	0	1033	0	0	1405	360
Future Volume (vph)	0	0	0	0	0	589	0	1033	0	0	1405	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	0	0	0	1536	0	3406	0	0	3406	1455
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	0	1536	0	3406	0	0	3406	1455
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		757			706			656			322	
Travel Time (s)		17.2			16.0			9.9			4.9	
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 (%)	0%	0%	0%	0%	0%	7%	0%	6%	0%	0%	6%	11%
Adj. Flow (vph)	0	0	0	0	0	607	0	1065	0	0	1448	371
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	607	0	1065	0	0	1448	371
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14			18	
Link Offset(ft)		-20			-35			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		30
Sign Control		Free			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

2026 Build Traffic Volumes without Improvements - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

PM Peak Hour
 04/09/2024

Intersection												
Int Delay, s/veh	28.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↗↗			↗↗	↗
Traffic Vol, veh/h	0	0	0	0	0	589	0	1033	0	0	1405	360
Future Vol, veh/h	0	0	0	0	0	589	0	1033	0	0	1405	360
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	7	0	6	0	0	6	11
Mvmt Flow	0	0	0	0	0	607	0	1065	0	0	1448	371

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	- 533	- 0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	- 7.04	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	- 3.37	-
Pot Cap-1 Maneuver	0	0 ~ 478	0
Stage 1	0	0	0
Stage 2	0	0	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	0 ~ 478	-
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-






















Approach	WB	NB	SB
HCM Control Delay, s/v	162.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT	SBR
Capacity (veh/h)	- 478	-	-
HCM Lane V/C Ratio	- 1.27	-	-
HCM Control Delay (s/veh)	- 162.8	-	-
HCM Lane LOS	- F	-	-
HCM 95th %tile Q (veh)	- 25.2	-	-

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

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 01/12/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	299	7	398	9	0	6	539	1350	39	16	1027	405
Future Volume (vph)	299	7	398	9	0	6	539	1350	39	16	1027	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	310		250	0		0	475		0	100		0
Storage Lanes	1		1	0		0	1		0	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.944			0.996				0.850
Flt Protected	0.950	0.954			0.971		0.950			0.950		
Satd. Flow (prot)	1633	1643	1455	0	1603	0	3114	3508	0	1805	3505	1599
Flt Permitted	0.950	0.954			0.971		0.950			0.950		
Satd. Flow (perm)	1633	1643	1455	0	1603	0	3114	3508	0	1805	3505	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			463		229			4				297
Link Speed (mph)		55			45			45			45	
Link Distance (ft)		767			504			609			892	
Travel Time (s)		9.5			7.6			9.2			13.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	5%	0%	11%	11%	0%	0%	13%	3%	3%	0%	3%	1%
Adj. Flow (vph)	348	8	463	10	0	7	627	1570	45	19	1194	471
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	177	179	463	0	17	0	627	1615	0	19	1194	471
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			45			25	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		25	15		9	15		9	15		15
Number of Detectors	2	2	2	2	2		2	2		1	2	2
Detector Template	Left											
Leading Detector (ft)	83	83	83	83	83		83	83		15	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	43
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Turn Type	Split	NA	Free	Split	NA		Prot	NA		Prot	NA	Free

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 01/12/2024

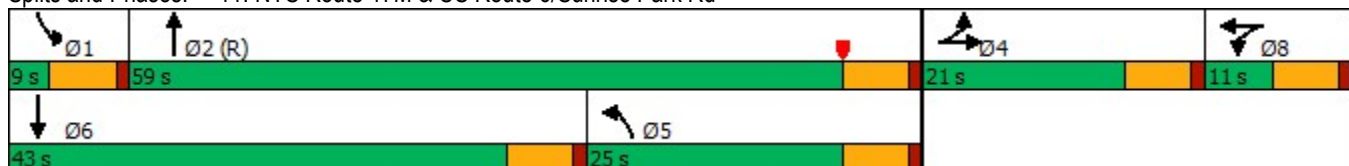


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free									Free
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		9.0	16.0		9.0	16.0	
Total Split (s)	21.0	21.0		11.0	11.0		25.0	59.0		9.0	43.0	
Total Split (%)	21.0%	21.0%		11.0%	11.0%		25.0%	59.0%		9.0%	43.0%	
Maximum Green (s)	15.0	15.0		5.0	5.0		19.0	53.0		3.0	37.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
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	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		3.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	Min	
v/c Ratio	0.80	0.80	0.32		0.06		0.92	0.69		0.22	0.81	0.29
Control Delay	67.9	68.1	0.6		0.4		52.9	11.2		53.1	31.6	0.5
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	67.9	68.1	0.6		0.4		52.9	11.2		53.1	31.6	0.5
Queue Length 50th (ft)	114	115	0		0		~230	200		12	304	0
Queue Length 95th (ft)	#200	#202	0		0		#311	333		35	#454	0
Internal Link Dist (ft)		687			424			529			812	
Turn Bay Length (ft)	310		250				475			100		
Base Capacity (vph)	244	246	1455		297		679	2331		86	1478	1599
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	0.73	0.73	0.32		0.06		0.92	0.69		0.22	0.81	0.29

Intersection Summary

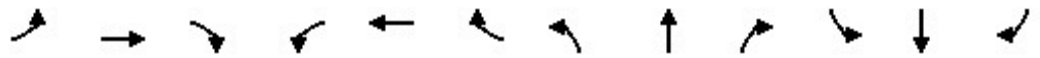
Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 10 (10%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

AM Peak Hour
 01/12/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	7	398	9	0	6	539	1350	39	16	1027	405
Future Volume (veh/h)	299	7	398	9	0	6	539	1350	39	16	1027	405
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	1826	1900	1737	1643	1806	1806	1744	1894	1894	1900	1856	1885
Adj Flow Rate, veh/h	354	0	0	10	0	7	627	1570	45	19	1194	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	0	11	11	0	0	13	3	3	0	3	1
Cap, veh/h	428	0		18	0	13	834	2164	62	23	1267	
Arrive On Green	0.12	0.00	0.00	0.02	0.00	0.02	0.26	0.61	0.61	0.01	0.36	0.00
Sat Flow, veh/h	3478	0	1472	963	0	674	3223	3573	102	1810	3526	1598
Grp Volume(v), veh/h	354	0	0	17	0	0	627	789	826	19	1194	0
Grp Sat Flow(s),veh/h/ln	1739	0	1472	1636	0	0	1611	1800	1876	1810	1763	1598
Q Serve(g_s), s	9.9	0.0	0.0	1.0	0.0	0.0	17.9	30.8	31.0	1.0	32.8	0.0
Cycle Q Clear(g_c), s	9.9	0.0	0.0	1.0	0.0	0.0	17.9	30.8	31.0	1.0	32.8	0.0
Prop In Lane	1.00		1.00	0.59		0.41	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	428	0		31	0	0	834	1090	1136	23	1267	
V/C Ratio(X)	0.83	0.00		0.55	0.00	0.00	0.75	0.72	0.73	0.84	0.94	
Avail Cap(c_a), veh/h	522	0		82	0	0	834	1090	1136	54	1304	
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	0.00
Uniform Delay (d), s/veh	42.8	0.0	0.0	48.6	0.0	0.0	34.1	13.8	13.9	49.3	31.0	0.0
Incr Delay (d2), s/veh	7.5	0.0	0.0	5.6	0.0	0.0	3.5	4.2	4.1	52.3	13.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	0.5	0.0	0.0	7.0	11.7	12.2	0.8	15.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	0.0	0.0	54.3	0.0	0.0	37.6	18.0	18.0	101.6	44.0	0.0
LnGrp LOS	D	A		D	A	A	D	B	B	F	D	
Approach Vol, veh/h		354	A		17			2242			1213	A
Approach Delay, s/veh		50.3			54.3			23.5			44.9	
Approach LOS		D			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	66.6		18.3	31.9	42.0		7.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	3.0	53.0		15.0	19.0	37.0		5.0				
Max Q Clear Time (g_c+I1), s	3.0	33.0		11.9	19.9	34.8		3.0				
Green Ext Time (p_c), s	0.0	6.0		0.4	0.0	1.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

AM Peak Hour
 01/12/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↑↑		↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	0	0	674	0	1254	0	0	1325	109
Future Volume (vph)	0	0	0	0	0	674	0	1254	0	0	1325	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	0.95	1.00
Fr _t						0.850						0.850
Fl _t Protected												
Satd. Flow (prot)	0	0	0	0	0	2787	0	3539	0	0	3539	1583
Fl _t Permitted												
Satd. Flow (perm)	0	0	0	0	0	2787	0	3539	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						33						98
Link Speed (mph)		30			30			45				45
Link Distance (ft)		757			706			656				322
Travel Time (s)		17.2			16.0			9.9				4.9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	0	0	775	0	1441	0	0	1523	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	775	0	1441	0	0	1523	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14				18
Link Offset(ft)		-20			-35			0				0
Crosswalk Width(ft)		16			30			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		30
Number of Detectors						2		2				0
Detector Template												
Leading Detector (ft)						83		83				0
Trailing Detector (ft)						-5		-5				0
Detector 1 Position(ft)						-5		-5				0
Detector 1 Size(ft)						40		40				6
Detector 1 Type						Cl+Ex		Cl+Ex				Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)						0.0		0.0				0.0
Detector 1 Queue (s)						0.0		0.0				0.0
Detector 1 Delay (s)						0.0		0.0				0.0
Detector 2 Position(ft)						43		43				
Detector 2 Size(ft)						40		40				
Detector 2 Type						Cl+Ex		Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)						0.0		0.0				
Turn Type						Prot		NA				Free
Protected Phases						4		2				6
Permitted Phases												Free
Detector Phase						4		2				6
Switch Phase												
Minimum Initial (s)						5.0		5.0				

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
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		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

AM Peak Hour
 01/12/2024

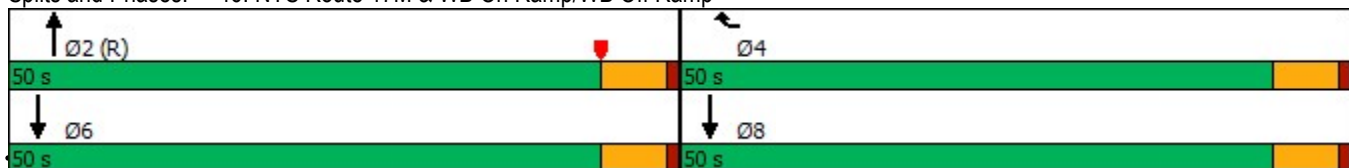


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)						24.0		24.0				
Total Split (s)						50.0		50.0				
Total Split (%)						50.0%		50.0%				
Maximum Green (s)						44.0		44.0				
Yellow Time (s)						5.0		5.0				
All-Red Time (s)						1.0		1.0				
Lost Time Adjust (s)						0.0		0.0				
Total Lost Time (s)						6.0		6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)						3.0		3.0				
Recall Mode						None		C-Max				
Act Effct Green (s)						34.5		53.5		100.0	100.0	
Actuated g/C Ratio						0.34		0.54		1.00	1.00	
v/c Ratio						0.79		0.76		0.43	0.08	
Control Delay						33.9		23.0		1.1	0.1	
Queue Delay						0.0		0.0		0.0	0.0	
Total Delay						33.9		23.0		1.1	0.1	
LOS						C		C		A	A	
Approach Delay					33.9			23.0		1.0		
Approach LOS					C			C		A		
Queue Length 50th (ft)						239		361		7	0	
Queue Length 95th (ft)						265		505		17	m0	
Internal Link Dist (ft)		677			626			576		242		
Turn Bay Length (ft)												
Base Capacity (vph)						1244		1892		3506	1583	
Starvation Cap Reductn						0		0		0	0	
Spillback Cap Reductn						0		0		0	0	
Storage Cap Reductn						0		0		0	0	
Reduced v/c Ratio						0.62		0.76		0.43	0.08	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 15.8
 Intersection LOS: B
 Intersection Capacity Utilization 68.2%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.






















Splits and Phases: 46: NYS Route 17M & WB On Ramp/WB Off Ramp



Lane Group	Ø6	Ø8
Minimum Split (s)	24.0	24.0
Total Split (s)	50.0	50.0
Total Split (%)	50%	50%
Maximum Green (s)	44.0	44.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	Max	None
Act Effct Green (s)		
Actuated g/C Ratio		
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		

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 01/12/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	485	16	556	31	16	35	442	1159	21	19	1178	430
Future Volume (vph)	485	16	556	31	16	35	442	1159	21	19	1178	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	310		250	0		0	475		0	100		0
Storage Lanes	1		1	0		0	1		0	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.942			0.997				0.850
Flt Protected	0.950	0.955			0.981		0.950			0.950		
Satd. Flow (prot)	1681	1692	1404	0	1659	0	3060	3511	0	1719	3539	1583
Flt Permitted	0.950	0.955			0.981		0.950			0.950		
Satd. Flow (perm)	1681	1692	1404	0	1659	0	3060	3511	0	1719	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			565		29			2				295
Link Speed (mph)		55			45			45			45	
Link Distance (ft)		767			504			609			892	
Travel Time (s)		9.5			7.6			9.2			13.5	
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 (%)	2%	0%	15%	3%	0%	6%	15%	3%	5%	5%	2%	2%
Adj. Flow (vph)	500	16	573	32	16	36	456	1195	22	20	1214	443
Shared Lane Traffic (%)	48%											
Lane Group Flow (vph)	260	256	573	0	84	0	456	1217	0	20	1214	443
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		12			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			45			25	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		25	15		9	15		9	15		15
Number of Detectors	2	2	2	2	2		2	2		1	2	2
Detector Template				Left								
Leading Detector (ft)	83	83	83	83	83		83	83		15	83	83
Trailing Detector (ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Position(ft)	-5	-5	-5	-5	-5		-5	-5		-5	-5	-5
Detector 1 Size(ft)	40	40	40	40	40		40	40		20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	43	43	43	43	43		43	43			43	43
Detector 2 Size(ft)	40	40	40	40	40		40	40			40	40
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Turn Type	Split	NA	Free	Split	NA		Prot	NA		Prot	NA	Free

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 01/12/2024

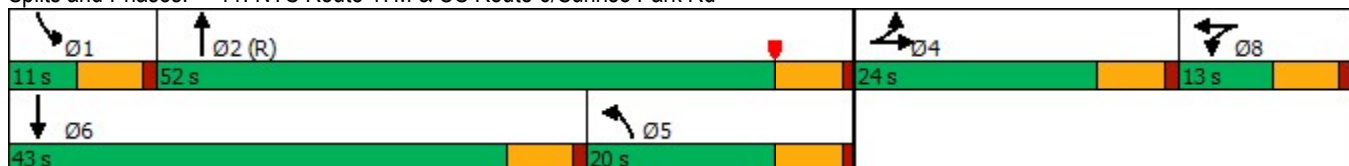


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free									Free
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		9.0	16.0		9.0	16.0	
Total Split (s)	24.0	24.0		13.0	13.0		20.0	52.0		11.0	43.0	
Total Split (%)	24.0%	24.0%		13.0%	13.0%		20.0%	52.0%		11.0%	43.0%	
Maximum Green (s)	18.0	18.0		7.0	7.0		14.0	46.0		5.0	37.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
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	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		3.0	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	Min	
v/c Ratio	0.90	0.88	0.41		0.63		0.94	0.62		0.22	0.89	0.28
Control Delay	73.7	70.4	0.9		52.2		68.6	15.7		51.7	38.7	0.4
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	73.7	70.4	0.9		52.2		68.6	15.7		51.7	38.7	0.4
Queue Length 50th (ft)	170	167	0		34		~168	185		13	384	0
Queue Length 95th (ft)	#316	#309	0		#96		#270	383		37	#524	0
Internal Link Dist (ft)		687			424			529			812	
Turn Bay Length (ft)	310		250				475			100		
Base Capacity (vph)	302	304	1404		143		484	1970		90	1368	1583
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	0.86	0.84	0.41		0.59		0.94	0.62		0.22	0.89	0.28

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 ~ 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: 11: NYS Route 17M & US Route 6/Sunrise Park Rd



2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 11: NYS Route 17M & US Route 6/Sunrise Park Rd

PM Peak Hour
 01/12/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	16	556	31	16	35	442	1159	21	19	1178	430
Future Volume (veh/h)	485	16	556	31	16	35	442	1159	21	19	1178	430
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	1870	1900	1678	1761	1806	1717	1714	1894	1864	1826	1870	1870
Adj Flow Rate, veh/h	511	0	0	32	16	36	456	1195	22	20	1214	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	15	3	0	6	15	3	5	5	2	2
Cap, veh/h	584	0		40	20	45	542	1876	35	23	1284	
Arrive On Green	0.16	0.00	0.00	0.06	0.06	0.06	0.17	0.52	0.52	0.01	0.36	0.00
Sat Flow, veh/h	3563	0	1422	628	314	706	3167	3615	67	1739	3554	1585
Grp Volume(v), veh/h	511	0	0	84	0	0	456	595	622	20	1214	0
Grp Sat Flow(s),veh/h/ln	1781	0	1422	1647	0	0	1584	1800	1882	1739	1777	1585
Q Serve(g_s), s	14.0	0.0	0.0	5.0	0.0	0.0	13.9	23.7	23.8	1.1	33.1	0.0
Cycle Q Clear(g_c), s	14.0	0.0	0.0	5.0	0.0	0.0	13.9	23.7	23.8	1.1	33.1	0.0
Prop In Lane	1.00		1.00	0.38		0.43	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	584	0		105	0	0	542	934	977	23	1284	
V/C Ratio(X)	0.87	0.00		0.80	0.00	0.00	0.84	0.64	0.64	0.86	0.95	
Avail Cap(c_a), veh/h	641	0		115	0	0	542	934	977	87	1315	
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(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.8	0.0	0.0	46.2	0.0	0.0	40.1	17.3	17.3	49.2	31.0	0.0
Incr Delay (d2), s/veh	11.2	0.0	0.0	26.9	0.0	0.0	10.9	3.3	3.2	54.1	13.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	0.0	2.8	0.0	0.0	6.0	9.5	10.0	0.8	15.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	0.0	0.0	73.1	0.0	0.0	51.0	20.6	20.5	103.3	44.4	0.0
LnGrp LOS	D	A		E	A	A	D	C	C	F	D	
Approach Vol, veh/h		511	A		84			1673			1234	A
Approach Delay, s/veh		52.0			73.1			28.8			45.4	
Approach LOS		D			E			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	57.9		22.4	23.1	42.1		12.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	46.0		18.0	14.0	37.0		7.0				
Max Q Clear Time (g_c+I1), s	3.1	25.8		16.0	15.9	35.1		7.0				
Green Ext Time (p_c), s	0.0	3.9		0.4	0.0	1.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved volume balancing among the lanes for turning movement.
- Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

PM Peak Hour
 01/12/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↑↑		↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	0	0	589	0	1033	0	0	1405	360
Future Volume (vph)	0	0	0	0	0	589	0	1033	0	0	1405	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected												
Satd. Flow (prot)	0	0	0	0	0	2656	0	3406	0	0	3406	1455
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	0	2656	0	3406	0	0	3406	1455
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						125						193
Link Speed (mph)		30			30			45				45
Link Distance (ft)		757			706			656				322
Travel Time (s)		17.2			16.0			9.9				4.9
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 (%)	0%	0%	0%	0%	0%	7%	0%	6%	0%	0%	6%	11%
Adj. Flow (vph)	0	0	0	0	0	607	0	1065	0	0	1448	371
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	607	0	1065	0	0	1448	371
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			14				18
Link Offset(ft)		-20			-35			0				0
Crosswalk Width(ft)		16			30			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		30
Number of Detectors						2		2				0
Detector Template												
Leading Detector (ft)						83		83				0
Trailing Detector (ft)						-5		-5				0
Detector 1 Position(ft)						-5		-5				0
Detector 1 Size(ft)						40		40				6
Detector 1 Type						Cl+Ex		Cl+Ex				Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)						0.0		0.0				0.0
Detector 1 Queue (s)						0.0		0.0				0.0
Detector 1 Delay (s)						0.0		0.0				0.0
Detector 2 Position(ft)						43		43				
Detector 2 Size(ft)						40		40				
Detector 2 Type						Cl+Ex		Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)						0.0		0.0				
Turn Type						Prot		NA				NA
Protected Phases						4		2				6 8
Permitted Phases												Free
Detector Phase						4		2				6 8
Switch Phase												

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		

2026 Build Traffic Volumes with Two Lane Off Ramp - Sensitivity Analysis
 46: NYS Route 17M & WB On Ramp/WB Off Ramp

PM Peak Hour
 01/12/2024

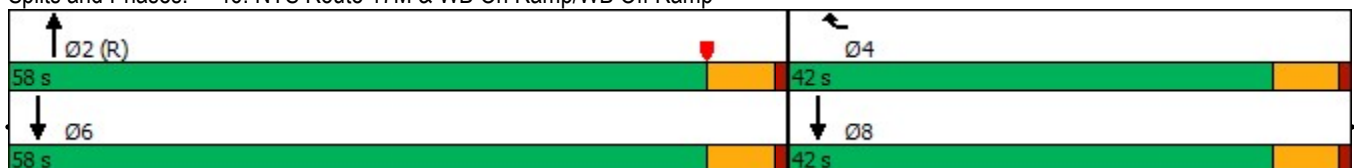


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)						5.0		5.0				
Minimum Split (s)						24.0		24.0				
Total Split (s)						42.0		58.0				
Total Split (%)						42.0%		58.0%				
Maximum Green (s)						36.0		52.0				
Yellow Time (s)						5.0		5.0				
All-Red Time (s)						1.0		1.0				
Lost Time Adjust (s)						0.0		0.0				
Total Lost Time (s)						6.0		6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)						3.0		3.0				
Recall Mode						None		C-Max				
Act Effct Green (s)						25.5		62.5		100.0	100.0	
Actuated g/C Ratio						0.26		0.62		1.00	1.00	
v/c Ratio						0.79		0.50		0.43	0.25	
Control Delay						34.7		12.2		0.6	0.3	
Queue Delay						0.0		0.0		0.0	0.0	
Total Delay						34.7		12.2		0.6	0.3	
LOS						C		B		A	A	
Approach Delay					34.7			12.2		0.5		
Approach LOS					C			B		A		
Queue Length 50th (ft)						165		177		0	0	
Queue Length 95th (ft)						211		282		m7	m0	
Internal Link Dist (ft)		677			626			576		242		
Turn Bay Length (ft)												
Base Capacity (vph)						1036		2130		3384	1455	
Starvation Cap Reductn						0		0		0	0	
Spillback Cap Reductn						0		0		0	0	
Storage Cap Reductn						0		0		0	0	
Reduced v/c Ratio						0.59		0.50		0.43	0.25	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 10.0
 Intersection LOS: B
 Intersection Capacity Utilization 59.2%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: NYS Route 17M & WB On Ramp/WB Off Ramp



Lane Group	Ø6	Ø8
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	24.0	24.0
Total Split (s)	58.0	42.0
Total Split (%)	58%	42%
Maximum Green (s)	52.0	36.0
Yellow Time (s)	5.0	5.0
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	Max	None
Act Effct Green (s)		
Actuated g/C Ratio		
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		