

Lanes, Volumes, Timings

2026 Total AM

1: Brownridge Road/Fifth Line & Steeles Avenue

Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
Future Volume (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	145.0		65.0	30.0		0.0	20.0		0.0	25.0		25.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	100.0			100.0			20.0			75.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.989			0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	2959	1524	1444	2606	0	1480	1154	0	1289	1900	1468
Flt Permitted	0.389			0.160			0.751			0.751		
Satd. Flow (perm)	691	2959	1524	243	2606	0	1170	1154	0	1019	1900	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70		24			91				91
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		486.3			703.6			285.2			91.4	
Travel Time (s)		29.2			42.2			20.5			6.6	
Peak Hour 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
Heavy Vehicles (%)	7%	22%	6%	25%	38%	24%	22%	0%	40%	40%	0%	10%
Adj. Flow (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	1400	70	25	690	0	15	10	0	30	10	85
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(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0		10.0	10.0		10.0	10.0	10.0

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2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	33.0	33.0	33.0	33.0	33.0		16.0	16.0		16.0	16.0	16.0
Total Split (s)	44.0	44.0	44.0	44.0	44.0		16.0	16.0		16.0	16.0	16.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	73.3%		26.7%	26.7%		26.7%	26.7%	26.7%
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0		10.0	10.0		10.0	10.0	10.0
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0		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)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max		None	None		None	None	None
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)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	16.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	0
Act Effct Green (s)	44.5	44.5	44.5	44.5	44.5		10.1	10.1		10.1	10.1	10.1
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.70		0.16	0.16		0.16	0.16	0.16
v/c Ratio	0.37	0.68	0.06	0.15	0.38		0.08	0.04		0.19	0.03	0.28
Control Delay	9.0	10.0	1.7	8.0	6.1		22.7	0.3		25.4	21.6	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	9.0	10.0	1.7	8.0	6.1		22.7	0.3		25.4	21.6	8.1
LOS	A	A	A	A	A		C	A		C	C	A
Approach Delay		9.5			6.2			13.8			13.3	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	63.5
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	8.8
Intersection LOS:	A
Intersection Capacity Utilization:	86.2%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 1: Brownridge Road/Fifth Line & Steeles Avenue

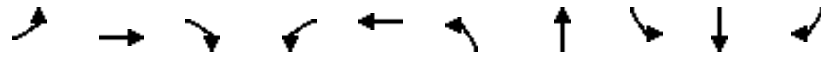


Queues

2026 Total AM

1: Brownridge Road/Fifth Line & Steeles Avenue

Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	180	1400	70	25	690	15	10	30	10	85
v/c Ratio	0.37	0.68	0.06	0.15	0.38	0.08	0.04	0.19	0.03	0.28
Control Delay	9.0	10.0	1.7	8.0	6.1	22.7	0.3	25.4	21.6	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	10.0	1.7	8.0	6.1	22.7	0.3	25.4	21.6	8.1
Queue Length 50th (m)	9.8	56.1	0.0	1.1	18.8	1.6	0.0	3.3	1.1	0.0
Queue Length 95th (m)	23.3	83.0	3.8	4.8	29.1	6.0	0.0	9.7	4.5	9.5
Internal Link Dist (m)	462.3		679.6			261.2		67.4		
Turn Bay Length (m)	145.0		65.0	30.0		20.0		25.0		25.0
Base Capacity (vph)	483	2072	1088	170	1832	186	259	161	301	309
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	0.37	0.68	0.06	0.15	0.38	0.08	0.04	0.19	0.03	0.28

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Brownridge Road/Fifth Line & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
Future Volume (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1687	2959	1524	1444	2607		1480	1154		1289	1900	1468
Flt Permitted	0.39	1.00	1.00	0.16	1.00		0.75	1.00		0.75	1.00	1.00
Satd. Flow (perm)	691	2959	1524	243	2607		1170	1154		1019	1900	1468
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	180	1400	70	25	640	50	15	0	10	30	10	85
RTOR Reduction (vph)	0	0	24	0	8	0	0	9	0	0	0	75
Lane Group Flow (vph)	180	1400	46	25	682	0	15	1	0	30	10	10
Heavy Vehicles (%)	7%	22%	6%	25%	38%	24%	22%	0%	40%	40%	0%	10%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	42.7	42.7	42.7	42.7	42.7		7.9	7.9		7.9	7.9	7.9
Effective Green, g (s)	42.7	42.7	42.7	42.7	42.7		7.9	7.9		7.9	7.9	7.9
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.66		0.12	0.12		0.12	0.12	0.12
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	456	1955	1007	160	1723		143	141		124	232	179
v/s Ratio Prot		c0.47			0.26			0.00				0.01
v/s Ratio Perm	0.26		0.03	0.10			0.01			c0.03		0.01
v/c Ratio	0.39	0.72	0.05	0.16	0.40		0.10	0.01		0.24	0.04	0.06
Uniform Delay, d1	5.0	7.0	3.8	4.1	5.0		25.2	24.9		25.6	25.0	25.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	2.3	0.1	2.1	0.7		0.3	0.0		1.0	0.1	0.1
Delay (s)	7.6	9.3	3.9	6.2	5.7		25.5	24.9		26.7	25.1	25.2
Level of Service	A	A	A	A	A		C	C		C	C	C
Approach Delay (s)		8.9			5.7			25.3			25.5	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM 2000 Control Delay			9.0			HCM 2000 Level of Service				A		
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			64.6			Sum of lost time (s)				14.0		
Intersection Capacity Utilization			86.2%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Fifth Line South & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Volume (vph)	1440	30	10	710	10	5
Future Volume (vph)	1440	30	10	710	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		30.0	60.0		15.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			100.0		30.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	2935	1538	1543	2635	1543	1615
Flt Permitted			0.172		0.950	
Satd. Flow (perm)	2935	1538	279	2635	1543	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		28				5
Link Speed (k/h)	60			60	60	
Link Distance (m)	703.6			479.7	556.9	
Travel Time (s)	42.2			28.8	33.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	23%	5%	17%	37%	17%	0%
Adj. Flow (vph)	1440	30	10	710	10	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1440	30	10	710	10	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	10.0	2.0	2.0	10.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	0.6	2.0	2.0	0.6	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	25.0	25.0	25.0	25.0	10.0	10.0

Lanes, Volumes, Timings
2: Fifth Line South & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	33.0	33.0	33.0	33.0	16.0	16.0
Total Split (s)	44.0	44.0	44.0	44.0	16.0	16.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	26.7%	26.7%
Maximum Green (s)	36.0	36.0	36.0	36.0	10.0	10.0
Yellow Time (s)	6.0	6.0	6.0	6.0	4.0	4.0
All-Red Time (s)	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)	8.0	8.0	8.0	8.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.2	58.2	58.2	58.2	10.1	10.1
Actuated g/C Ratio	0.94	0.94	0.94	0.94	0.16	0.16
v/c Ratio	0.52	0.02	0.04	0.29	0.04	0.02
Control Delay	3.1	1.2	2.6	1.9	25.3	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.1	1.2	2.6	1.9	25.3	17.2
LOS	A	A	A	A	C	B
Approach Delay	3.1			1.9	22.6	
Approach LOS	A			A	C	

Intersection Summary

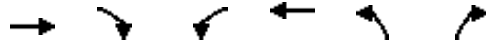
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	62.2
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	2.8
Intersection Capacity Utilization	59.8%
Analysis Period (min)	15
Intersection LOS:	A
ICU Level of Service	B

Splits and Phases: 2: Fifth Line South & Steeles Avenue



Queues
2: Fifth Line South & Steeles Avenue

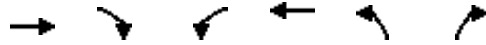
2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1440	30	10	710	10	5
v/c Ratio	0.52	0.02	0.04	0.29	0.04	0.02
Control Delay	3.1	1.2	2.6	1.9	25.3	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.1	1.2	2.6	1.9	25.3	17.2
Queue Length 50th (m)	0.0	0.0	0.0	0.0	1.0	0.0
Queue Length 95th (m)	83.4	2.3	1.9	29.5	5.5	2.9
Internal Link Dist (m)	679.6			455.7	532.9	
Turn Bay Length (m)		30.0	60.0		15.0	
Base Capacity (vph)	2747	1441	261	2466	250	265
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	0.52	0.02	0.04	0.29	0.04	0.02
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
2: Fifth Line South & Steeles Avenue

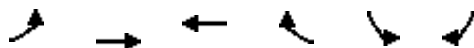
2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Volume (vph)	1440	30	10	710	10	5
Future Volume (vph)	1440	30	10	710	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	2935	1538	1543	2635	1543	1615
Flt Permitted	1.00	1.00	0.17	1.00	0.95	1.00
Satd. Flow (perm)	2935	1538	279	2635	1543	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1440	30	10	710	10	5
RTOR Reduction (vph)	0	7	0	0	0	5
Lane Group Flow (vph)	1440	23	10	710	10	0
Heavy Vehicles (%)	23%	5%	17%	37%	17%	0%
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Actuated Green, G (s)	51.5	51.5	51.5	51.5	1.7	1.7
Effective Green, g (s)	51.5	51.5	51.5	51.5	1.7	1.7
Actuated g/C Ratio	0.77	0.77	0.77	0.77	0.03	0.03
Clearance Time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2249	1178	213	2019	39	40
v/s Ratio Prot	c0.49			0.27		
v/s Ratio Perm		0.02	0.04		c0.01	0.00
v/c Ratio	0.64	0.02	0.05	0.35	0.26	0.00
Uniform Delay, d1	3.6	1.9	1.9	2.5	32.1	31.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	0.0	0.4	0.5	3.5	0.0
Delay (s)	5.0	1.9	2.3	3.0	35.6	32.0
Level of Service	A	A	A	A	D	C
Approach Delay (s)	4.9			3.0	34.4	
Approach LOS	A			A	C	
Intersection Summary						
HCM 2000 Control Delay			4.5		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			67.2		Sum of lost time (s)	14.0
Intersection Capacity Utilization			59.8%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
3: Steeles Avenue & Sixth Line

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	50	1490	685	10	15	45
Future Volume (vph)	50	1490	685	10	15	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	60.0			30.0	30.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				7.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	2935	2674	1077	1031	1568
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1752	2935	2674	1077	1031	1568
Link Speed (k/h)		60	80		70	
Link Distance (m)		479.7	905.3		3066.1	
Travel Time (s)		28.8	40.7		157.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	23%	35%	50%	75%	3%
Adj. Flow (vph)	50	1490	685	10	15	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	1490	685	10	15	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

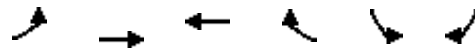
Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.2%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

3: Steeles Avenue & Sixth Line

























2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↵	↑↑	↑↑	↵	↵	↵		
Traffic Volume (veh/h)	50	1490	685	10	15	45		
Future Volume (Veh/h)	50	1490	685	10	15	45		
Sign Control		Free	Free		Stop			
Grade		0%	0%		0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	50	1490	685	10	15	45		
Pedestrians								
Lane Width (m)								
Walking Speed (m/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None	None					
Median storage veh								
Upstream signal (m)								
pX, platoon unblocked								
vC, conflicting volume	695				1530	342		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	695				1530	342		
tC, single (s)	4.2				8.3	7.0		
tC, 2 stage (s)								
tF (s)	2.2				4.2	3.3		
p0 queue free %	94				70	93		
cM capacity (veh/h)	890				51	651		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	50	745	745	342	342	10	15	45
Volume Left	50	0	0	0	0	0	15	0
Volume Right	0	0	0	0	0	10	0	45
cSH	890	1700	1700	1700	1700	1700	51	651
Volume to Capacity	0.06	0.44	0.44	0.20	0.20	0.01	0.30	0.07
Queue Length 95th (m)	1.4	0.0	0.0	0.0	0.0	0.0	8.2	1.8
Control Delay (s)	9.3	0.0	0.0	0.0	0.0	0.0	103.3	10.9
Lane LOS	A						F	B
Approach Delay (s)	0.3			0.0			34.0	
Approach LOS							D	
Intersection Summary								
Average Delay			1.1					
Intersection Capacity Utilization			51.2%		ICU Level of Service		A	
Analysis Period (min)			15					

Lanes, Volumes, Timings
4: Sixth Line South & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Future Volume (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	30.0		30.0	60.0		30.0	30.0		0.0	30.0		60.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.949			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3085	1615	1736	2798	1538	1597	1739	0	1719	1663	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3085	1615	1736	2798	1538	1597	1739	0	1719	1663	0
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		905.3			497.0			169.8			447.0	
Travel Time (s)		40.7			22.4			12.2			32.2	
Peak Hour 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
Heavy Vehicles (%)	5%	17%	0%	4%	29%	5%	13%	2%	7%	5%	5%	5%
Adj. Flow (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	1290	35	110	395	165	15	235	0	35	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

























Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	71.5%
ICU Level of Service	C
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

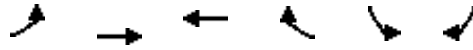
4: Sixth Line South & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1290	35	110	395	165	15	155	80	35	30	35
Future Volume (Veh/h)	180	1290	35	110	395	165	15	155	80	35	30	35
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	180	1290	35	110	395	165	15	155	80	35	30	35
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	560			1325			2118	2430	645	1778	2300	198
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			1325			2118	2430	645	1778	2300	198
tC, single (s)	4.2			4.2			7.8	6.5	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.4	3.5	4.0	3.3
p0 queue free %	82			78			0	0	80	0	0	96
cM capacity (veh/h)	987			507			0	20	403	0	23	801
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	180	645	645	35	110	198	198	165	15	235	35	65
Volume Left	180	0	0	0	110	0	0	0	15	0	35	0
Volume Right	0	0	0	35	0	0	0	165	0	80	0	35
cSH	987	1700	1700	1700	507	1700	1700	1700	0	30	0	49
Volume to Capacity	0.18	0.38	0.38	0.02	0.22	0.12	0.12	0.10	Err	7.89	Err	1.32
Queue Length 95th (m)	5.3	0.0	0.0	0.0	6.5	0.0	0.0	0.0	Err	Err	Err	48.2
Control Delay (s)	9.5	0.0	0.0	0.0	14.1	0.0	0.0	0.0	Err	Err	Err	371.4
Lane LOS	A				B				F	F	F	F
Approach Delay (s)	1.1				2.3				Err		Err	
Approach LOS									F		F	
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			71.5%		ICU Level of Service				C			
Analysis Period (min)			15									

Lanes, Volumes, Timings
5: Steeles Avenue & Hornby Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



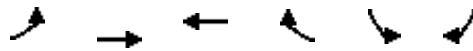
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	1260	790	75	20	45
Future Volume (vph)	40	1260	790	75	20	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	60.0			30.0	30.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				7.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1687	2911	2597	1509	1543	1509
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1687	2911	2597	1509	1543	1509
Link Speed (k/h)		60	60		60	
Link Distance (m)		497.0	179.1		1049.4	
Travel Time (s)		29.8	10.7		63.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	24%	39%	7%	17%	7%
Adj. Flow (vph)	40	1260	790	75	20	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	1260	790	75	20	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	44.8%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 5: Steeles Avenue & Hornby Road

























2026 Total AM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↶	↷	↷	↷	↶	↷		
Traffic Volume (veh/h)	40	1260	790	75	20	45		
Future Volume (Veh/h)	40	1260	790	75	20	45		
Sign Control		Free	Free		Stop			
Grade		0%	0%		0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	40	1260	790	75	20	45		
Pedestrians								
Lane Width (m)								
Walking Speed (m/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None	None					
Median storage veh								
Upstream signal (m)								
pX, platoon unblocked								
vC, conflicting volume	865				1500	395		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	865				1500	395		
tC, single (s)	4.2				7.1	7.0		
tC, 2 stage (s)								
tF (s)	2.3				3.7	3.4		
p0 queue free %	95				78	92		
cM capacity (veh/h)	743				92	590		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	40	630	630	395	395	75	20	45
Volume Left	40	0	0	0	0	0	20	0
Volume Right	0	0	0	0	0	75	0	45
cSH	743	1700	1700	1700	1700	1700	92	590
Volume to Capacity	0.05	0.37	0.37	0.23	0.23	0.04	0.22	0.08
Queue Length 95th (m)	1.4	0.0	0.0	0.0	0.0	0.0	6.1	2.0
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	0.0	54.4	11.6
Lane LOS	B						F	B
Approach Delay (s)	0.3	0.0			24.8			
Approach LOS							C	
Intersection Summary								
Average Delay	0.9							
Intersection Capacity Utilization	44.8%			ICU Level of Service			A	
Analysis Period (min)	15							

Lanes, Volumes, Timings
6: Trafalgar Road & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	740	280	590	675	70	320	585	445	200	1370	345
Future Volume (vph)	140	740	280	590	675	70	320	585	445	200	1370	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	115.0		40.0	130.0		70.0	100.0		65.0	250.0		80.0
Storage Lanes	2		1	2		1	2		1	1		1
Taper Length (m)	100.0			100.0			80.0			100.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	2633	4433	1179	3400	4084	1455	2148	3167	1524	1752	3438	950
Flt Permitted	0.950			0.950			0.950			0.431		
Satd. Flow (perm)	2633	4433	1179	3400	4084	1455	2148	3167	1524	795	3438	950
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			181			143			445			211
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		382.9			311.3			332.0			289.5	
Travel Time (s)		23.0			18.7			17.1			14.9	
Peak Hour 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
Heavy Vehicles (%)	33%	17%	37%	3%	27%	11%	63%	14%	6%	3%	5%	70%
Adj. Flow (vph)	140	740	280	590	675	70	320	585	445	200	1370	345
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	740	280	590	675	70	320	585	445	200	1370	345
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(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	9.0	20.0	20.0

Lanes, Volumes, Timings
6: Trafalgar Road & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	12.0	27.0	27.0	13.0	27.0	27.0	13.0	28.0	28.0	13.0	28.0	28.0
Total Split (s)	18.0	29.0	29.0	28.0	39.0	39.0	25.0	74.0	74.0	14.0	63.0	63.0
Total Split (%)	12.4%	20.0%	20.0%	19.3%	26.9%	26.9%	17.2%	51.0%	51.0%	9.7%	43.4%	43.4%
Maximum Green (s)	13.0	22.0	22.0	23.0	32.0	32.0	20.0	66.0	66.0	10.0	55.0	55.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0	1.0	3.0	3.0
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	0.0
Total Lost Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	0.2
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	11.8	22.0	22.0	23.0	33.2	33.2	20.0	66.1	66.1	68.9	55.0	55.0
Actuated g/C Ratio	0.08	0.15	0.15	0.16	0.23	0.23	0.14	0.46	0.46	0.48	0.38	0.38
v/c Ratio	0.65	1.10	0.84	1.09	0.72	0.16	1.08	0.41	0.47	0.45	1.05	0.70
Control Delay	78.9	121.1	43.7	122.3	57.1	0.8	132.6	27.4	3.8	19.6	82.6	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	121.1	43.7	122.3	57.1	0.8	132.6	27.4	3.8	19.6	82.6	22.8
LOS	E	F	D	F	E	A	F	C	A	B	F	C
Approach Delay		97.3			83.0			44.6			65.3	
Approach LOS		F			F			D			E	

Intersection Summary













Area Type:	Other
Cycle Length:	145
Actuated Cycle Length:	145
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle:	145
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.10
Intersection Signal Delay:	71.0
Intersection LOS:	E
Intersection Capacity Utilization	101.3%
ICU Level of Service	G
Analysis Period (min)	15

Splits and Phases: 6: Trafalgar Road & Steeles Avenue



Queues
6: Trafalgar Road & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	140	740	280	590	675	70	320	585	445	200	1370	345
v/c Ratio	0.65	1.10	0.84	1.09	0.72	0.16	1.08	0.41	0.47	0.45	1.05	0.70
Control Delay	78.9	121.1	43.7	122.3	57.1	0.8	132.6	27.4	3.8	19.6	82.6	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	121.1	43.7	122.3	57.1	0.8	132.6	27.4	3.8	19.6	82.6	22.8
Queue Length 50th (m)	21.3	~92.7	30.6	~103.5	70.4	0.0	~55.5	61.2	0.0	27.6	~236.8	34.9
Queue Length 95th (m)	33.4	#121.8	#81.8	#142.3	86.5	0.0	#87.8	77.4	19.4	41.5	#281.7	78.0
Internal Link Dist (m)		358.9			287.3			308.0			265.5	
Turn Bay Length (m)	115.0		40.0	130.0		70.0	100.0		65.0	250.0		80.0
Base Capacity (vph)	236	672	332	539	934	442	296	1443	937	444	1304	491
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	1.10	0.84	1.09	0.72	0.16	1.08	0.41	0.47	0.45	1.05	0.70

Intersection Summary

~ 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.

HCM Signalized Intersection Capacity Analysis
6: Trafalgar Road & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	140	740	280	590	675	70	320	585	445	200	1370	345	
Future Volume (vph)	140	740	280	590	675	70	320	585	445	200	1370	345	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	2633	4433	1179	3400	4084	1455	2148	3167	1524	1752	3438	950	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.43	1.00	1.00	
Satd. Flow (perm)	2633	4433	1179	3400	4084	1455	2148	3167	1524	796	3438	950	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	140	740	280	590	675	70	320	585	445	200	1370	345	
RTOR Reduction (vph)	0	0	154	0	0	54	0	0	242	0	0	131	
Lane Group Flow (vph)	140	740	126	590	675	16	320	585	203	200	1370	214	
Heavy Vehicles (%)	33%	17%	37%	3%	27%	11%	63%	14%	6%	3%	5%	70%	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8		5	2		1	6		
Permitted Phases			4			8			2	6		6	
Actuated Green, G (s)	11.8	22.0	22.0	23.0	33.2	33.2	20.0	66.1	66.1	64.9	55.0	55.0	
Effective Green, g (s)	11.8	22.0	22.0	23.0	33.2	33.2	20.0	66.1	66.1	64.9	55.0	55.0	
Actuated g/C Ratio	0.08	0.15	0.15	0.16	0.23	0.23	0.14	0.46	0.46	0.45	0.38	0.38	
Clearance Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0	
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	0.2	
Lane Grp Cap (vph)	214	672	178	539	935	333	296	1443	694	421	1304	360	
v/s Ratio Prot	0.05	c0.17		c0.17	0.17		c0.15	0.18		0.03	c0.40		
v/s Ratio Perm			0.11			0.01			0.13	0.18		0.23	
v/c Ratio	0.65	1.10	0.71	1.09	0.72	0.05	1.08	0.41	0.29	0.48	1.05	0.59	
Uniform Delay, d1	64.6	61.5	58.5	61.0	51.6	43.6	62.5	26.3	24.8	25.0	45.0	36.1	
Progression 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	
Incremental Delay, d2	7.0	65.7	12.5	67.1	2.8	0.1	75.6	0.8	1.1	0.8	39.4	7.1	
Delay (s)	71.6	127.2	71.0	128.1	54.4	43.6	138.1	27.2	25.8	25.8	84.4	43.1	
Level of Service	E	F	E	F	D	D	F	C	C	C	F	D	
Approach Delay (s)		106.9			86.4			53.0			70.8		
Approach LOS		F			F			D			E		
Intersection Summary													
HCM 2000 Control Delay			77.5									HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.07										
Actuated Cycle Length (s)			145.0									Sum of lost time (s)	25.0
Intersection Capacity Utilization			101.3%									ICU Level of Service	G
Analysis Period (min)			15										
c Critical Lane Group													

Lanes, Volumes, Timings
7: Toronto Premier Outlets & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↘	↖
Traffic Volume (vph)	1330	10	10	1310	30	5
Future Volume (vph)	1330	10	10	1310	30	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		130.0	45.0		0.0	40.0
Storage Lanes		1	1		2	1
Taper Length (m)			80.0		7.5	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	4848	1615	1543	4590	3045	1615
Flt Permitted			0.149		0.950	
Satd. Flow (perm)	4848	1615	242	4590	3045	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				5
Link Speed (k/h)	60			60	50	
Link Distance (m)	311.3			200.7	119.1	
Travel Time (s)	18.7			12.0	8.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	0%	17%	13%	15%	0%
Adj. Flow (vph)	1330	10	10	1310	30	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1330	10	10	1310	30	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			7.2	7.2	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	10.0	2.0	2.0	10.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	0.6	2.0	2.0	0.6	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	20.0	20.0	6.0	20.0	10.0	10.0

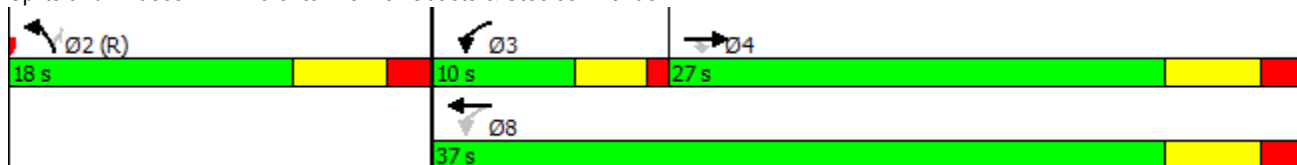


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	26.0	26.0	10.0	26.0	17.0	17.0
Total Split (s)	27.0	27.0	10.0	37.0	18.0	18.0
Total Split (%)	49.1%	49.1%	18.2%	67.3%	32.7%	32.7%
Maximum Green (s)	21.0	21.0	6.0	31.0	12.0	12.0
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Recall Mode	Max	Max	None	Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	17.0	17.0		17.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	29.0	29.0	33.0	31.0	12.0	12.0
Actuated g/C Ratio	0.53	0.53	0.60	0.56	0.22	0.22
v/c Ratio	0.52	0.01	0.03	0.51	0.05	0.01
Control Delay	10.2	5.6	4.7	8.2	17.3	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	5.6	4.7	8.2	17.3	11.6
LOS	B	A	A	A	B	B
Approach Delay	10.2			8.2	16.5	
Approach LOS	B			A	B	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	55
Offset:	0 (0%), Referenced to phase 2:NBL an 6:, Start of Green
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.52
Intersection Signal Delay:	9.3
Intersection Capacity Utilization	44.0%
Analysis Period (min)	15
Intersection LOS:	A
ICU Level of Service	A

Splits and Phases: 7: Toronto Premier Outlets & Steeles Avenue



	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1330	10	10	1310	30	5
v/c Ratio	0.52	0.01	0.03	0.51	0.05	0.01
Control Delay	10.2	5.6	4.7	8.2	17.3	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	5.6	4.7	8.2	17.3	11.6
Queue Length 50th (m)	26.9	0.0	0.4	26.9	1.2	0.0
Queue Length 95th (m)	56.1	2.4	1.7	36.5	4.0	2.3
Internal Link Dist (m)	287.3			176.7	95.1	
Turn Bay Length (m)		130.0	45.0			40.0
Base Capacity (vph)	2556	856	287	2587	664	356
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	0.52	0.01	0.03	0.51	0.05	0.01
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
7: Toronto Premier Outlets & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↘	↑↑↑	↘	↗
Traffic Volume (vph)	1330	10	10	1310	30	5
Future Volume (vph)	1330	10	10	1310	30	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	4848	1615	1543	4590	3045	1615
Flt Permitted	1.00	1.00	0.15	1.00	0.95	1.00
Satd. Flow (perm)	4848	1615	242	4590	3045	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1330	10	10	1310	30	5
RTOR Reduction (vph)	0	5	0	0	0	4
Lane Group Flow (vph)	1330	5	10	1310	30	1
Heavy Vehicles (%)	7%	0%	17%	13%	15%	0%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	29.0	29.0	34.2	34.2	8.8	8.8
Effective Green, g (s)	29.0	29.0	34.2	34.2	8.8	8.8
Actuated g/C Ratio	0.53	0.53	0.62	0.62	0.16	0.16
Clearance Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Lane Grp Cap (vph)	2556	851	178	2854	487	258
v/s Ratio Prot	c0.27		0.00	c0.29	c0.01	
v/s Ratio Perm		0.00	0.03			0.00
v/c Ratio	0.52	0.01	0.06	0.46	0.06	0.00
Uniform Delay, d1	8.5	6.2	4.5	5.5	19.6	19.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.0	0.1	0.5	0.2	0.0
Delay (s)	9.2	6.2	4.6	6.0	19.8	19.4
Level of Service	A	A	A	A	B	B
Approach Delay (s)	9.2			6.0	19.8	
Approach LOS	A			A	B	
Intersection Summary						
HCM 2000 Control Delay			7.8		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.43			
Actuated Cycle Length (s)			55.0		Sum of lost time (s)	16.0
Intersection Capacity Utilization			44.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
Future Volume (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	30.0		30.0	0.0		0.0	85.0		0.0
Storage Lanes	1		1	1		1	2		0	1		0
Taper Length (m)	55.0			90.0			7.5			45.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.887			0.853	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	4673	1404	1752	4287	1482	2633	1536	0	1787	1605	0
Flt Permitted	0.234			0.164			0.950			0.744		
Satd. Flow (perm)	423	4673	1404	303	4287	1482	2633	1536	0	1400	1605	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			205			205		15			465	
Link Speed (k/h)		60			60			50			70	
Link Distance (m)		200.7			870.8			218.1			618.0	
Travel Time (s)		12.0			52.2			15.7			31.8	
Peak Hour 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
Heavy Vehicles (%)	5%	11%	15%	3%	21%	9%	33%	0%	13%	1%	0%	1%
Adj. Flow (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	1225	20	40	875	185	5	20	0	275	475	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
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(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4		4	8		8				6		
Detector Phase	7	4	4	3	8	8	5	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	10.0	10.0		10.0	10.0	

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area

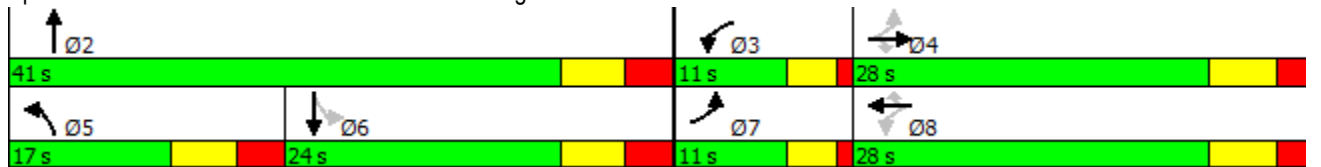


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	26.0	26.0	11.0	26.0	26.0	17.0	17.0		17.0	17.0	
Total Split (s)	11.0	28.0	28.0	11.0	28.0	28.0	17.0	41.0		24.0	24.0	
Total Split (%)	13.8%	35.0%	35.0%	13.8%	35.0%	35.0%	21.3%	51.3%		30.0%	30.0%	
Maximum Green (s)	7.0	22.0	22.0	7.0	22.0	22.0	10.0	34.0		17.0	17.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	3.0	3.0		3.0	3.0	
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)	4.0	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2	0.2	4.0	4.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	None		Max	Max	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0				
Flash Dont Walk (s)		17.0	17.0		17.0	17.0		21.0				
Pedestrian Calls (#/hr)		0	0		0	0		0				
Act Effct Green (s)	33.5	28.9	28.9	31.9	24.4	24.4	10.2	20.0		17.3	17.3	
Actuated g/C Ratio	0.51	0.44	0.44	0.48	0.37	0.37	0.15	0.30		0.26	0.26	
v/c Ratio	0.28	0.60	0.03	0.13	0.55	0.27	0.01	0.04		0.75	0.62	
Control Delay	11.4	18.5	0.1	10.2	19.8	3.9	28.2	9.6		40.7	7.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	11.4	18.5	0.1	10.2	19.8	3.9	28.2	9.6		40.7	7.3	
LOS	B	B	A	B	B	A	C	A		D	A	
Approach Delay		17.7			16.8			13.3			19.5	
Approach LOS		B			B			B			B	

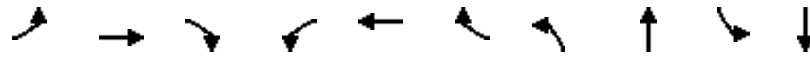
Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	66.2
Natural Cycle:	80
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.75
Intersection Signal Delay:	17.8
Intersection LOS:	B
Intersection Capacity Utilization:	73.0%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 8: Toronto Premium Outlets/Eighth Line & Steeles Avenue



8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	100	1225	20	40	875	185	5	20	275	475
v/c Ratio	0.28	0.60	0.03	0.13	0.55	0.27	0.01	0.04	0.75	0.62
Control Delay	11.4	18.5	0.1	10.2	19.8	3.9	28.2	9.6	40.7	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	18.5	0.1	10.2	19.8	3.9	28.2	9.6	40.7	7.3
Queue Length 50th (m)	5.2	32.4	0.0	2.0	31.3	0.0	0.3	0.5	32.0	1.0
Queue Length 95th (m)	18.3	#96.7	0.0	9.0	60.8	11.7	2.0	4.5	#91.9	28.5
Internal Link Dist (m)		176.7			846.8			194.1		594.0
Turn Bay Length (m)	105.0		55.0	30.0		30.0			85.0	
Base Capacity (vph)	353	2040	728	301	1581	676	405	809	366	763
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	0.28	0.60	0.03	0.13	0.55	0.27	0.01	0.02	0.75	0.62

Intersection Summary

























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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2026 Total AM

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
Future Volume (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	4673	1404	1752	4287	1482	2633	1536		1787	1605	
Flt Permitted	0.23	1.00	1.00	0.16	1.00	1.00	0.95	1.00		0.74	1.00	
Satd. Flow (perm)	423	4673	1404	303	4287	1482	2633	1536		1400	1605	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	100	1225	20	40	875	185	5	5	15	275	10	465
RTOR Reduction (vph)	0	0	12	0	0	120	0	10	0	0	357	0
Lane Group Flow (vph)	100	1225	8	40	875	65	5	10	0	275	118	0
Heavy Vehicles (%)	5%	11%	15%	3%	21%	9%	33%	0%	13%	1%	0%	1%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2				6
Permitted Phases	4		4	8		8				6		
Actuated Green, G (s)	34.3	28.9	28.9	28.7	26.1	26.1	1.6	25.9		17.3	17.3	
Effective Green, g (s)	34.3	28.9	28.9	28.7	26.1	26.1	1.6	25.9		17.3	17.3	
Actuated g/C Ratio	0.46	0.39	0.39	0.39	0.35	0.35	0.02	0.35		0.23	0.23	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2	0.2	4.0	4.0		3.0	3.0	
Lane Grp Cap (vph)	289	1815	545	167	1503	519	56	534		325	373	
v/s Ratio Prot	c0.03	c0.26		0.01	0.20		c0.00	0.01				0.07
v/s Ratio Perm	0.13		0.01	0.08		0.04				c0.20		
v/c Ratio	0.35	0.67	0.01	0.24	0.58	0.13	0.09	0.02		0.85	0.32	
Uniform Delay, d1	11.9	18.9	14.0	14.7	19.7	16.4	35.7	15.9		27.3	23.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	2.0	0.0	0.7	1.7	0.5	0.9	0.0		22.9	2.2	
Delay (s)	12.6	20.9	14.0	15.4	21.4	16.9	36.6	15.9		50.2	25.9	
Level of Service	B	C	B	B	C	B	D	B		D	C	
Approach Delay (s)		20.2			20.4			20.1			34.8	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay			23.6				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			74.4				Sum of lost time (s)			24.0		
Intersection Capacity Utilization			73.0%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
 9: Eighth Line South & Steeles Avenue

2026 Total AM
 Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (vph)	1505	5	5	1100	5	0
Future Volume (vph)	1505	5	5	1100	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	90.0		30.0	0.0
Storage Lanes		0	1		1	1
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950		0.950	
Satd. Flow (prot)	4717	0	1805	4359	1805	1900
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	4717	0	1805	4359	1805	1900
Link Speed (k/h)	70			70	50	
Link Distance (m)	870.8			525.4	458.2	
Travel Time (s)	44.8			27.0	33.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	0%	0%	19%	0%	0%
Adj. Flow (vph)	1505	5	5	1100	5	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1510	0	5	1100	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	39.2%
ICU Level of Service	A
Analysis Period (min)	15

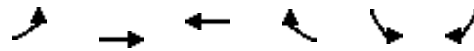
HCM Unsignalized Intersection Capacity Analysis
 9: Eighth Line South & Steeles Avenue

2026 Total AM
 Premier Gateway Phase 1B Employment Area

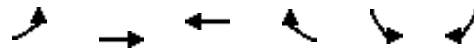
	→	↘	↙	←	↖	↗					
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗					
Traffic Volume (veh/h)	1505	5	5	1100	5	0					
Future Volume (Veh/h)	1505	5	5	1100	5	0					
Sign Control	Free			Free	Stop						
Grade	0%			0%	0%						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00					
Hourly flow rate (vph)	1505	5	5	1100	5	0					
Pedestrians											
Lane Width (m)											
Walking Speed (m/s)											
Percent Blockage											
Right turn flare (veh)											
Median type	None			None							
Median storage veh											
Upstream signal (m)											
pX, platoon unblocked											
vC, conflicting volume			1510			1884	504				
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol			1510			1884	504				
tC, single (s)			4.1			6.8	6.9				
tC, 2 stage (s)											
tF (s)			2.2			3.5	3.3				
p0 queue free %			99			92	100				
cM capacity (veh/h)			449			63	518				
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2		
Volume Total	602	602	306	5	367	367	367	5	0		
Volume Left	0	0	0	5	0	0	0	5	0		
Volume Right	0	0	5	0	0	0	0	0	0		
cSH	1700	1700	1700	449	1700	1700	1700	63	1700		
Volume to Capacity	0.35	0.35	0.18	0.01	0.22	0.22	0.22	0.08	0.00		
Queue Length 95th (m)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.0	0.0		
Control Delay (s)	0.0	0.0	0.0	13.1	0.0	0.0	0.0	66.8	0.0		
Lane LOS				B				F	A		
Approach Delay (s)	0.0			0.1				66.8			
Approach LOS								F			
Intersection Summary											
Average Delay			0.2								
Intersection Capacity Utilization			39.2%		ICU Level of Service				A		
Analysis Period (min)			15								

Lanes, Volumes, Timings
10: Steeles Avenue & Ninth Line

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑↑	↑↑	↗	↖↗	↗
Traffic Volume (vph)	100	1435	1040	280	750	100
Future Volume (vph)	100	1435	1040	280	750	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	65.0			75.0	90.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				40.0	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1556	4759	3059	1509	3433	1324
Flt Permitted	0.145				0.950	
Satd. Flow (perm)	237	4759	3059	1509	3433	1324
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				280		100
Link Speed (k/h)		70	70		70	
Link Distance (m)		525.4	169.8		3120.2	
Travel Time (s)		27.0	8.7		160.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	9%	18%	7%	2%	22%
Adj. Flow (vph)	100	1435	1040	280	750	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	1435	1040	280	750	100
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		7.2	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	2.0	10.0	10.0	2.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	0.6	2.0	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	6
Switch Phase						
Minimum Initial (s)	7.0	20.0	20.0	20.0	10.0	10.0

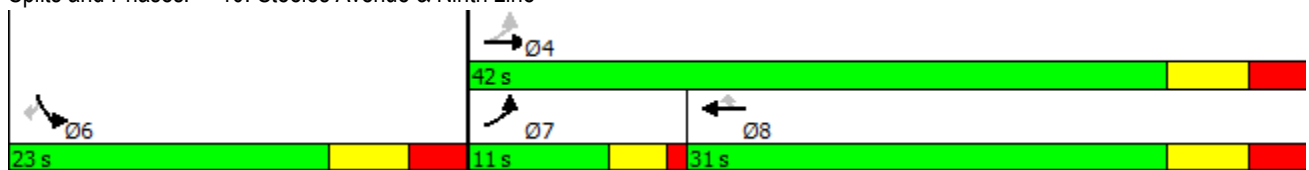


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	11.0	27.0	27.0	27.0	17.0	17.0
Total Split (s)	11.0	42.0	31.0	31.0	23.0	23.0
Total Split (%)	16.9%	64.6%	47.7%	47.7%	35.4%	35.4%
Maximum Green (s)	7.0	35.0	24.0	24.0	16.0	16.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Recall Mode	None	Max	Max	Max	Max	Max
Act Effct Green (s)	38.0	35.0	26.2	26.2	16.0	16.0
Actuated g/C Ratio	0.58	0.54	0.40	0.40	0.25	0.25
v/c Ratio	0.36	0.56	0.84	0.36	0.89	0.25
Control Delay	9.7	11.0	27.4	3.6	38.6	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	11.0	27.4	3.6	38.6	6.8
LOS	A	B	C	A	D	A
Approach Delay		10.9	22.4		34.9	
Approach LOS		B	C		C	

Intersection Summary

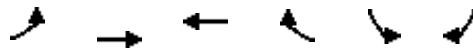
Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Natural Cycle:	65
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.89
Intersection Signal Delay:	20.5
Intersection LOS:	C
Intersection Capacity Utilization:	71.0%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 10: Steeles Avenue & Ninth Line



Queues
10: Steeles Avenue & Ninth Line

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	100	1435	1040	280	750	100
v/c Ratio	0.36	0.56	0.84	0.36	0.89	0.25
Control Delay	9.7	11.0	27.4	3.6	38.6	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	11.0	27.4	3.6	38.6	6.8
Queue Length 50th (m)	5.0	40.1	64.5	0.0	47.2	0.0
Queue Length 95th (m)	10.7	52.2	#103.8	13.7	#77.5	10.4
Internal Link Dist (m)		501.4	145.8		3096.2	
Turn Bay Length (m)	65.0			75.0	90.0	
Base Capacity (vph)	280	2562	1233	775	845	401
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	0.36	0.56	0.84	0.36	0.89	0.25

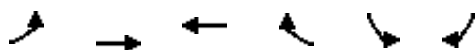
Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

10: Steeles Avenue & Ninth Line

2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↵	↑↑↑↑	↑↑	↵	↵↵	↵
Traffic Volume (vph)	100	1435	1040	280	750	100
Future Volume (vph)	100	1435	1040	280	750	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Flt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1556	4759	3059	1509	3433	1324
Flt Permitted	0.14	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	237	4759	3059	1509	3433	1324
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	100	1435	1040	280	750	100
RTOR Reduction (vph)	0	0	0	169	0	76
Lane Group Flow (vph)	100	1435	1040	111	750	24
Heavy Vehicles (%)	16%	9%	18%	7%	2%	22%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	35.8	35.8	26.2	26.2	16.0	16.0
Effective Green, g (s)	35.8	35.8	26.2	26.2	16.0	16.0
Actuated g/C Ratio	0.54	0.54	0.40	0.40	0.24	0.24
Clearance Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Lane Grp Cap (vph)	241	2589	1218	600	834	321
v/s Ratio Prot	0.04	c0.30	c0.34		c0.22	
v/s Ratio Perm	0.19			0.07		0.02
v/c Ratio	0.41	0.55	0.85	0.19	0.90	0.08
Uniform Delay, d1	9.3	9.8	18.1	12.9	24.1	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.9	7.7	0.7	14.6	0.5
Delay (s)	10.5	10.7	25.8	13.6	38.7	19.7
Level of Service	B	B	C	B	D	B
Approach Delay (s)		10.6	23.2		36.5	
Approach LOS		B	C		D	
Intersection Summary						
HCM 2000 Control Delay			21.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			65.8		Sum of lost time (s)	18.0
Intersection Capacity Utilization			71.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	80	10	5	460	1895	310
Future Volume (vph)	80	10	5	460	1895	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	100.0			0.0
Storage Lanes	1	0	0			0
Taper Length (m)	7.5		100.0			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.981	
Flt Protected	0.957			0.999		
Satd. Flow (prot)	1443	0	0	1631	1787	0
Flt Permitted	0.957			0.999		
Satd. Flow (perm)	1443	0	0	1631	1787	0
Link Speed (k/h)	60			80	80	
Link Distance (m)	54.4			135.9	215.8	
Travel Time (s)	3.3			6.1	9.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	25%	17%	50%	16%	5%	0%
Adj. Flow (vph)	80	10	5	460	1895	310
Shared Lane Traffic (%)						
Lane Group Flow (vph)	90	0	0	465	2205	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	130.3%
ICU Level of Service	H
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 11: Trafalgar Rd & Hornby Rd

















2026 Total AM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	10	5	460	1895	310
Future Volume (Veh/h)	80	10	5	460	1895	310
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	80	10	5	460	1895	310
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	2520	2050	1895			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2520	2050	1895			
tC, single (s)	6.6	6.4	4.6			
tC, 2 stage (s)						
tF (s)	3.7	3.5	2.7			
p0 queue free %	0	84	98			
cM capacity (veh/h)	25	63	224			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	90	465	2205			
Volume Left	80	5	0			
Volume Right	10	0	310			
cSH	27	224	1700			
Volume to Capacity	3.32	0.02	1.30			
Queue Length 95th (m)	Err	0.5	0.0			
Control Delay (s)	Err	0.9	0.0			
Lane LOS	F	A				
Approach Delay (s)	Err	0.9	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			326.2			
Intersection Capacity Utilization			130.3%	ICU Level of Service	H	
Analysis Period (min)			15			

Lanes, Volumes, Timings
12: Fifth Line & 5 Side Road

















2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	805	15	30	225	5	5	30	25	50	60	35
Future Volume (vph)	15	805	15	30	225	5	5	30	25	50	60	35
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	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.997			0.944			0.967	
Flt Protected		0.999			0.994			0.996			0.983	
Satd. Flow (prot)	0	1852	0	0	1785	0	0	1537	0	0	1724	0
Flt Permitted		0.999			0.994			0.996			0.983	
Satd. Flow (perm)	0	1852	0	0	1785	0	0	1537	0	0	1724	0
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		320.1			648.3			2473.7			211.2	
Travel Time (s)		19.2			38.9			127.2			10.9	
Peak Hour 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
Heavy Vehicles (%)	10%	2%	9%	10%	5%	0%	25%	20%	10%	9%	4%	0%
Adj. Flow (vph)	15	805	15	30	225	5	5	30	25	50	60	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	835	0	0	260	0	0	60	0	0	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	67.4%						ICU Level of Service C					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

12: Fifth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	15	805	15	30	225	5	5	30	25	50	60	35	
Future Volume (Veh/h)	15	805	15	30	225	5	5	30	25	50	60	35	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour 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	
Hourly flow rate (vph)	15	805	15	30	225	5	5	30	25	50	60	35	
Pedestrians													
Lane Width (m)													
Walking Speed (m/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None					None							
Median storage veh													
Upstream signal (m)													
pX, platoon unblocked													
vC, conflicting volume	230			820				1195	1132	812	1170	1138	228
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	230			820				1195	1132	812	1170	1138	228
tC, single (s)	4.2			4.2				7.3	6.7	6.3	7.2	6.5	6.2
tC, 2 stage (s)													
tF (s)	2.3			2.3				3.7	4.2	3.4	3.6	4.0	3.3
p0 queue free %	99			96				95	83	93	61	68	96
cM capacity (veh/h)	1292			775				102	179	367	129	190	817
Direction, Lane #	EB 1	WB 1	NB 1	SB 1									
Volume Total	835	260	60	145									
Volume Left	15	30	5	50									
Volume Right	15	5	25	35									
cSH	1292	775	211	194									
Volume to Capacity	0.01	0.04	0.28	0.75									
Queue Length 95th (m)	0.3	1.0	9.0	39.4									
Control Delay (s)	0.3	1.5	28.8	64.1									
Lane LOS	A	A	D	F									
Approach Delay (s)	0.3	1.5	28.8	64.1									
Approach LOS			D	F									
Intersection Summary													
Average Delay			9.0										
Intersection Capacity Utilization			67.4%	ICU Level of Service	C								
Analysis Period (min)			15										

Lanes, Volumes, Timings
13: Sixth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	10	850	5	15	240	5	5	15	40	30	30	25
Future Volume (vph)	10	850	5	15	240	5	5	15	40	30	30	25
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	1.00	1.00	1.00	1.00	1.00
Fr _t		0.999			0.997			0.910			0.960	
Fl _t Protected		0.999			0.997			0.996			0.983	
Satd. Flow (prot)	0	1839	0	0	1794	0	0	1547	0	0	1732	0
Fl _t Permitted		0.999			0.997			0.996			0.983	
Satd. Flow (perm)	0	1839	0	0	1794	0	0	1547	0	0	1732	0
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		620.4			640.8			3066.1			190.9	
Travel Time (s)		37.2			38.4			157.7			9.8	
Peak Hour 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
Heavy Vehicles (%)	14%	3%	1%	0%	5%	33%	0%	0%	17%	10%	0%	0%
Adj. Flow (vph)	10	850	5	15	240	5	5	15	40	30	30	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	865	0	0	260	0	0	60	0	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	66.1%
ICU Level of Service	C
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

13: Sixth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	10	850	5	15	240	5	5	15	40	30	30	25
Future Volume (Veh/h)	10	850	5	15	240	5	5	15	40	30	30	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	10	850	5	15	240	5	5	15	40	30	30	25
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
		None			None							
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	245			855			1185	1148	852	1192	1148	242
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	245			855			1185	1148	852	1192	1148	242
tC, single (s)	4.2			4.1			7.1	6.5	6.4	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.5	3.6	4.0	3.3
p0 queue free %	99			98			96	92	88	77	85	97
cM capacity (veh/h)	1254			793			140	195	338	128	195	801
Direction, Lane #												
	EB 1	WB 1	NB 1	SB 1								
Volume Total	865	260	60	85								
Volume Left	10	15	5	30								
Volume Right	5	5	40	25								
cSH	1254	793	260	203								
Volume to Capacity	0.01	0.02	0.23	0.42								
Queue Length 95th (m)	0.2	0.5	7.0	15.3								
Control Delay (s)	0.2	0.8	23.0	34.9								
Lane LOS	A	A	C	D								
Approach Delay (s)	0.2	0.8	23.0	34.9								
Approach LOS			C	D								
Intersection Summary												
Average Delay			3.7									
Intersection Capacity Utilization			66.1%		ICU Level of Service				C			
Analysis Period (min)			15									

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Future Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		40.0	40.0		0.0	40.0		0.0	50.0		20.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	80.0			80.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.984			0.984				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1656	3539	1568	1687	3300	0	1444	2857	0	1480	3374	1292
Flt Permitted	0.663			0.274			0.077			0.418		
Satd. Flow (perm)	1156	3539	1568	487	3300	0	117	2857	0	651	3374	1292
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145		11			19				120
Link Speed (k/h)		60			60			80			80	
Link Distance (m)		223.8			665.2			264.1			262.0	
Travel Time (s)		13.4			39.9			11.9			11.8	
Peak Hour 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
Heavy Vehicles (%)	9%	2%	3%	7%	1%	63%	25%	25%	19%	22%	7%	25%
Adj. Flow (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	460	380	120	140	0	40	555	0	35	1810	45
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(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		6			6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	25.0		7.0	25.0	25.0

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

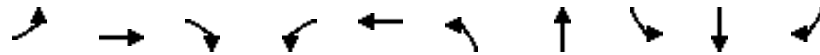
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.0	22.0	22.0	9.0	22.0		11.0	32.0		11.0	32.0	32.0
Total Split (s)	9.0	22.0	22.0	9.0	22.0		11.0	58.0		11.0	58.0	58.0
Total Split (%)	9.0%	22.0%	22.0%	9.0%	22.0%		11.0%	58.0%		11.0%	58.0%	58.0%
Maximum Green (s)	5.0	16.0	16.0	5.0	16.0		7.0	52.0		7.0	52.0	52.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	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)	4.0	6.0	6.0	4.0	6.0		4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		3.0	5.0		3.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	Max		None	Max	Max
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0			20.0			20.0	20.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	23.1	16.1	16.1	24.8	19.9		58.2	52.2		58.2	52.2	52.2
Actuated g/C Ratio	0.24	0.17	0.17	0.26	0.21		0.61	0.55		0.61	0.55	0.55
v/c Ratio	0.15	0.77	0.99	0.63	0.20		0.24	0.35		0.08	0.98	0.06
Control Delay	28.4	48.9	70.9	46.6	32.6		10.0	13.2		6.9	40.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	28.4	48.9	70.9	46.6	32.6		10.0	13.2		6.9	40.6	0.2
LOS	C	D	E	D	C		A	B		A	D	A
Approach Delay		57.3			39.0			13.0			39.0	
Approach LOS		E			D			B			D	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	95.6
Natural Cycle:	100
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.99
Intersection Signal Delay:	39.2
Intersection LOS:	D
Intersection Capacity Utilization:	93.5%
ICU Level of Service:	F
Analysis Period (min):	15

Splits and Phases: 14: Trafalgar Rd & 5 Side Road





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	45	460	380	120	140	40	555	35	1810	45
v/c Ratio	0.15	0.77	0.99	0.63	0.20	0.24	0.35	0.08	0.98	0.06
Control Delay	28.4	48.9	70.9	46.6	32.6	10.0	13.2	6.9	40.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	48.9	70.9	46.6	32.6	10.0	13.2	6.9	40.6	0.2
Queue Length 50th (m)	6.9	48.2	~53.4	19.2	12.2	2.7	32.5	2.3	~209.5	0.0
Queue Length 95th (m)	15.8	#72.3	#114.5	#42.4	21.5	6.3	44.9	5.7	#253.8	0.0
Internal Link Dist (m)		199.8			641.2		240.1		238.0	
Turn Bay Length (m)	40.0		40.0	40.0		40.0		50.0		20.0
Base Capacity (vph)	304	594	383	189	696	168	1567	457	1841	759
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	0.15	0.77	0.99	0.63	0.20	0.24	0.35	0.08	0.98	0.06

Intersection Summary

~ 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.

HCM Signalized Intersection Capacity Analysis

14: Trafalgar Rd & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Future Volume (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	3539	1568	1687	3300		1444	2856		1480	3374	1292
Flt Permitted	0.66	1.00	1.00	0.27	1.00		0.08	1.00		0.42	1.00	1.00
Satd. Flow (perm)	1156	3539	1568	486	3300		116	2856		651	3374	1292
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	460	380	120	125	15	40	495	60	35	1810	45
RTOR Reduction (vph)	0	0	119	0	9	0	0	9	0	0	0	21
Lane Group Flow (vph)	45	460	261	120	131	0	40	546	0	35	1810	24
Heavy Vehicles (%)	9%	2%	3%	7%	1%	63%	25%	25%	19%	22%	7%	25%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	20.7	17.8	17.8	24.9	19.9		56.2	52.2		56.2	52.2	52.2
Effective Green, g (s)	20.7	17.8	17.8	24.9	19.9		56.2	52.2		56.2	52.2	52.2
Actuated g/C Ratio	0.21	0.18	0.18	0.25	0.20		0.57	0.53		0.57	0.53	0.53
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)	256	636	281	182	663		119	1505		403	1779	681
v/s Ratio Prot	0.01	0.13		c0.03	0.04		c0.01	0.19		0.00	c0.54	
v/s Ratio Perm	0.03		c0.17	0.13			0.18			0.05		0.02
v/c Ratio	0.18	0.72	0.93	0.66	0.20		0.34	0.36		0.09	1.02	0.03
Uniform Delay, d1	31.8	38.3	40.0	31.2	32.9		20.9	13.7		9.5	23.4	11.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	5.0	36.2	8.4	0.3		1.7	0.7		0.1	25.8	0.1
Delay (s)	32.2	43.3	76.2	39.6	33.2		22.6	14.4		9.6	49.2	11.4
Level of Service	C	D	E	D	C		C	B		A	D	B
Approach Delay (s)		56.8			36.2			14.9			47.6	
Approach LOS		E			D			B			D	
Intersection Summary												
HCM 2000 Control Delay			43.7				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			99.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			93.5%				ICU Level of Service			F		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↕			↕	
Traffic Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Future Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.990			0.970			0.985	
Flt Protected		0.997			0.986			0.999			0.995	
Satd. Flow (prot)	0	3489	0	0	3374	0	0	1811	0	0	1860	0
Flt Permitted		0.915			0.647			0.979			0.952	
Satd. Flow (perm)	0	3202	0	0	2214	0	0	1775	0	0	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			10			34			15	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		643.4			668.7			2468.4			454.5	
Travel Time (s)		38.6			40.1			126.9			23.4	
Peak Hour 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
Heavy Vehicles (%)	13%	2%	14%	7%	3%	8%	0%	1%	4%	0%	0%	1%
Adj. Flow (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	525	0	0	290	0	0	180	0	0	920	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		46.0	46.0		46.0	46.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		65.7%	65.7%		65.7%	65.7%	

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	18.0	18.0		18.0	18.0		40.0	40.0		40.0	40.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		16.4			16.4			40.0			40.0	
Actuated g/C Ratio		0.24			0.24			0.58			0.58	
v/c Ratio		0.68			0.54			0.17			0.88	
Control Delay		28.6			26.0			6.0			24.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		28.6			26.0			6.0			24.7	
LOS		C			C			A			C	
Approach Delay		28.6			26.0			6.0			24.7	
Approach LOS		C			C			A			C	

Intersection Summary

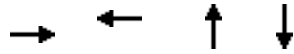
Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	68.4
Natural Cycle:	70
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.88
Intersection Signal Delay:	24.2
Intersection LOS:	C
Intersection Capacity Utilization:	109.1%
ICU Level of Service:	H
Analysis Period (min):	15

Splits and Phases: 15: Eighth Line & 5 Side Road



Queues
15: Eighth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	525	290	180	920
v/c Ratio	0.68	0.54	0.17	0.88
Control Delay	28.6	26.0	6.0	24.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.6	26.0	6.0	24.7
Queue Length 50th (m)	33.5	17.2	7.8	91.8
Queue Length 95th (m)	49.4	28.9	17.0	#187.5
Internal Link Dist (m)	619.4	644.7	2444.4	430.5
Turn Bay Length (m)				
Base Capacity (vph)	844	590	1052	1047
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	0.49	0.17	0.88

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

15: Eighth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Future Volume (vph)	30	485	10	80	190	20	5	135	40	85	730	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		1.00			0.99			0.97			0.98	
Flt Protected		1.00			0.99			1.00			1.00	
Satd. Flow (prot)		3490			3374			1811			1860	
Flt Permitted		0.92			0.65			0.98			0.95	
Satd. Flow (perm)		3203			2212			1775			1778	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	485	10	80	190	20	5	135	40	85	730	105
RTOR Reduction (vph)	0	2	0	0	8	0	0	14	0	0	6	0
Lane Group Flow (vph)	0	523	0	0	282	0	0	166	0	0	914	0
Heavy Vehicles (%)	13%	2%	14%	7%	3%	8%	0%	1%	4%	0%	0%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.4			16.4			40.0			40.0	
Effective Green, g (s)		16.4			16.4			40.0			40.0	
Actuated g/C Ratio		0.24			0.24			0.58			0.58	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		767			530			1038			1039	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.13			0.09			c0.51	
v/c Ratio		0.68			0.53			0.16			0.88	
Uniform Delay, d1		23.6			22.7			6.5			12.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		2.5			1.0			0.3			10.6	
Delay (s)		26.1			23.7			6.8			22.7	
Level of Service		C			C			A			C	
Approach Delay (s)		26.1			23.7			6.8			22.7	
Approach LOS		C			C			A			C	
Intersection Summary												
HCM 2000 Control Delay		22.3			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.82										
Actuated Cycle Length (s)		68.4			Sum of lost time (s)			12.0				
Intersection Capacity Utilization		109.1%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

Lanes, Volumes, Timings
16: Ninth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↶↷		↶	↶↷	↶	↶	↶↷		↶	↶↷	
Traffic Volume (vph)	30	610	35	5	225	20	15	400	30	345	850	35
Future Volume (vph)	30	610	35	5	225	20	15	400	30	345	850	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	40.0		40.0	40.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.992				0.850		0.990			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1641	3440	0	1805	3539	1615	1289	3215	0	1805	3388	0
Flt Permitted	0.611			0.315			0.321			0.397		
Satd. Flow (perm)	1055	3440	0	598	3539	1615	436	3215	0	754	3388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				127		12			10	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		580.9			458.3			3120.2			329.9	
Travel Time (s)		34.9			27.5			160.5			17.0	
Peak Hour 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
Heavy Vehicles (%)	10%	4%	6%	0%	2%	0%	40%	12%	0%	0%	6%	4%
Adj. Flow (vph)	30	610	35	5	225	20	15	400	30	345	850	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	645	0	5	225	20	15	430	0	345	885	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0	15.0	15.0	15.0		7.0	20.0	

Lanes, Volumes, Timings
16: Ninth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.0	24.0		24.0	24.0	24.0	21.0	21.0		11.0	26.0	
Total Split (s)	24.0	24.0		24.0	24.0	24.0	21.0	21.0		15.0	36.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%	40.0%	35.0%	35.0%		25.0%	60.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	15.0	15.0		11.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		4.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.5	3.5		3.5	3.5	3.5	5.5	5.5		3.0	5.5	
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Walk Time (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Flash Dont Walk (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)	16.6	16.6		16.6	16.6	16.6	15.9	15.9		32.0	30.0	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.27	0.27		0.55	0.51	
v/c Ratio	0.10	0.66		0.03	0.22	0.04	0.13	0.49		0.58	0.51	
Control Delay	16.4	21.9		15.6	16.6	0.1	20.7	20.3		12.2	10.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	16.4	21.9		15.6	16.6	0.1	20.7	20.3		12.2	10.8	
LOS	B	C		B	B	A	C	C		B	B	
Approach Delay		21.6			15.3			20.3			11.2	
Approach LOS		C			B			C			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	58.6
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	15.9
Intersection LOS:	B
Intersection Capacity Utilization:	77.0%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 16: Ninth Line & 5 Side Road






























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	645	5	225	20	15	430	345	885
v/c Ratio	0.10	0.66	0.03	0.22	0.04	0.13	0.49	0.58	0.51
Control Delay	16.4	21.9	15.6	16.6	0.1	20.7	20.3	12.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	21.9	15.6	16.6	0.1	20.7	20.3	12.2	10.8
Queue Length 50th (m)	2.5	32.7	0.4	10.1	0.0	1.3	21.4	20.1	31.8
Queue Length 95th (m)	7.9	48.5	2.5	17.6	0.0	5.8	34.6	36.2	47.6
Internal Link Dist (m)		556.9		434.3			3096.2		305.9
Turn Bay Length (m)	40.0		40.0		40.0	40.0		40.0	
Base Capacity (vph)	324	1064	183	1087	584	118	880	609	1739
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	0.09	0.61	0.03	0.21	0.03	0.13	0.49	0.57	0.51
Intersection Summary									

























HCM Signalized Intersection Capacity Analysis
16: Ninth Line & 5 Side Road

2026 Total AM
Premier Gateway Phase 1B Employment Area

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		 			 			 			 		
Traffic Volume (vph)	30	610	35	5	225	20	15	400	30	345	850	35	
Future Volume (vph)	30	610	35	5	225	20	15	400	30	345	850	35	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		4.0	6.0		
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95		
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	0.99		
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1641	3439		1805	3539	1615	1289	3214		1805	3388		
Flt Permitted	0.61	1.00		0.31	1.00	1.00	0.32	1.00		0.40	1.00		
Satd. Flow (perm)	1056	3439		598	3539	1615	436	3214		755	3388		
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	30	610	35	5	225	20	15	400	30	345	850	35	
RTOR Reduction (vph)	0	7	0	0	0	14	0	9	0	0	5	0	
Lane Group Flow (vph)	30	638	0	5	225	6	15	421	0	345	880	0	
Heavy Vehicles (%)	10%	4%	6%	0%	2%	0%	40%	12%	0%	0%	6%	4%	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA		
Protected Phases		4			8			2		1	6		
Permitted Phases	4			8		8	2			6			
Actuated Green, G (s)	16.6	16.6		16.6	16.6	16.6	15.9	15.9		30.0	30.0		
Effective Green, g (s)	16.6	16.6		16.6	16.6	16.6	15.9	15.9		30.0	30.0		
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.27	0.27		0.51	0.51		
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		4.0	6.0		
Vehicle Extension (s)	3.5	3.5		3.5	3.5	3.5	5.5	5.5		3.0	5.5		
Lane Grp Cap (vph)	299	974		169	1002	457	118	872		567	1734		
v/s Ratio Prot		c0.19			0.06			0.13		c0.10	0.26		
v/s Ratio Perm	0.03			0.01		0.00	0.03			c0.21			
v/c Ratio	0.10	0.65		0.03	0.22	0.01	0.13	0.48		0.61	0.51		
Uniform Delay, d1	15.5	18.5		15.2	16.1	15.1	16.1	17.9		8.9	9.4		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2	0.2	1.7		0.1	0.1	0.0	2.2	1.9		1.9	1.1		
Delay (s)	15.7	20.1		15.3	16.2	15.1	18.3	19.8		10.7	10.5		
Level of Service	B	C		B	B	B	B	B		B	B		
Approach Delay (s)		19.9			16.1			19.8			10.6		
Approach LOS		B			B			B			B		
Intersection Summary													
HCM 2000 Control Delay			15.1									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.67										
Actuated Cycle Length (s)			58.6									Sum of lost time (s)	16.0
Intersection Capacity Utilization			77.0%									ICU Level of Service	D
Analysis Period (min)			15										
c Critical Lane Group													

Lanes, Volumes, Timings
17: "Street C"/"Street B" & Steeles Avenue

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10
Future Volume (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	30.0		30.0	60.0		30.0	30.0		100.0	30.0		0.0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	4183	1538	3433	3732	1583	1770	1863	1583	1719	1538	0
Flt Permitted	0.183			0.219			0.751			0.757		
Satd. Flow (perm)	331	4183	1538	791	3732	1583	1399	1863	1583	1370	1538	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185			50			125		94	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		317.8			382.9			215.0			231.4	
Travel Time (s)		19.1			23.0			15.5			16.7	
Peak Hour 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
Heavy Vehicles (%)	5%	24%	5%	2%	39%	2%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1140	185	475	1285	50	30	0	80	20	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	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	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	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	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm		Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	8	8	8	2	2	2	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	5.0	

Lanes, Volumes, Timings
17: "Street C"/"Street B" & Steeles Avenue

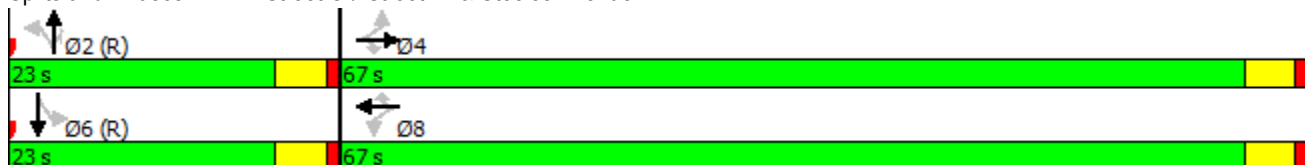
2026 Total AM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	67.0	67.0	67.0	67.0	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%	25.6%	25.6%
Maximum Green (s)	62.5	62.5	62.5	62.5	62.5	62.5	18.5	18.5	18.5	18.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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	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	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	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	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	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	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	59.9	59.9	59.9	59.9	59.9	59.9	21.1		21.1	21.1	21.1	21.1
Actuated g/C Ratio	0.67	0.67	0.67	0.67	0.67	0.67	0.23		0.23	0.23	0.23	0.23
v/c Ratio	0.09	0.41	0.17	0.90	0.52	0.05	0.09		0.17	0.06	0.02	
Control Delay	5.6	7.2	1.1	35.7	8.3	1.4	30.1		2.8	29.6	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	5.6	7.2	1.1	35.7	8.3	1.4	30.1		2.8	29.6	0.1	
LOS	A	A	A	D	A	A	C		A	C	A	
Approach Delay		6.4			15.3			10.3			19.8	
Approach LOS		A			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	11.5
Intersection LOS:	B
Intersection Capacity Utilization:	55.2%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 17: "Street C"/"Street B" & Steeles Avenue

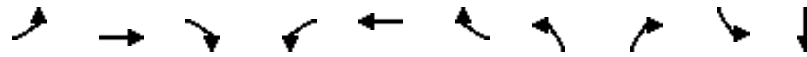


Queues

2026 Total AM

17: "Street C"/"Street B" & Steeles Avenue

Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	20	1140	185	475	1285	50	30	80	20	10
v/c Ratio	0.09	0.41	0.17	0.90	0.52	0.05	0.09	0.17	0.06	0.02
Control Delay	5.6	7.2	1.1	35.7	8.3	1.4	30.1	2.8	29.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.6	7.2	1.1	35.7	8.3	1.4	30.1	2.8	29.6	0.1
Queue Length 50th (m)	1.0	27.5	0.0	29.2	34.3	0.0	4.5	0.0	3.0	0.0
Queue Length 95th (m)	3.5	34.5	5.6	#70.4	43.5	3.1	12.1	4.6	9.1	0.0
Internal Link Dist (m)	293.8		358.9				207.4			
Turn Bay Length (m)	30.0		30.0	60.0		30.0	30.0	100.0	30.0	
Base Capacity (vph)	229	2904	1124	549	2591	1114	328	466	321	432
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	0.09	0.39	0.16	0.87	0.50	0.04	0.09	0.17	0.06	0.02






























Intersection Summary

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 17: "Street C"/"Street B" & Steeles Avenue

2026 Total AM
 Premier Gateway Phase 1B Employment Area

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		  		 	  								
Traffic Volume (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10	
Future Volume (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00		1.00	1.00	1.00		
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00		0.85	1.00	0.85		
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00		
Satd. Flow (prot)	1719	4183	1538	3433	3732	1583	1770		1583	1719	1538		
Flt Permitted	0.18	1.00	1.00	0.22	1.00	1.00	0.75		1.00	0.76	1.00		
Satd. Flow (perm)	330	4183	1538	791	3732	1583	1399		1583	1370	1538		
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	20	1140	185	475	1285	50	30	0	80	20	0	10	
RTOR Reduction (vph)	0	0	62	0	0	17	0	0	61	0	8	0	
Lane Group Flow (vph)	20	1140	123	475	1285	33	30	0	19	20	2	0	
Heavy Vehicles (%)	5%	24%	5%	2%	39%	2%	2%	2%	2%	5%	5%	5%	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm		Perm	Perm	NA		
Protected Phases		4			8			2				6	
Permitted Phases	4		4	8		8	2		2	6			
Actuated Green, G (s)	59.9	59.9	59.9	59.9	59.9	59.9	21.1		21.1	21.1	21.1		
Effective Green, g (s)	59.9	59.9	59.9	59.9	59.9	59.9	21.1		21.1	21.1	21.1		
Actuated g/C Ratio	0.67	0.67	0.67	0.67	0.67	0.67	0.23		0.23	0.23	0.23		
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		
Lane Grp Cap (vph)	219	2784	1023	526	2483	1053	327		371	321	360		
v/s Ratio Prot		0.27			0.34							0.00	
v/s Ratio Perm	0.06		0.08	0.60		0.02	0.02		0.01	0.01			
v/c Ratio	0.09	0.41	0.12	0.90	0.52	0.03	0.09		0.05	0.06	0.01		
Uniform Delay, d1	5.4	6.9	5.5	12.6	7.7	5.1	27.0		26.7	26.8	26.4		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		
Incremental Delay, d2	0.2	0.1	0.1	18.7	0.2	0.0	0.6		0.3	0.4	0.0		
Delay (s)	5.5	7.0	5.5	31.3	7.9	5.2	27.5		26.9	27.1	26.4		
Level of Service	A	A	A	C	A	A	C		C	C	C		
Approach Delay (s)		6.8			13.9			27.1			26.9		
Approach LOS		A			B			C			C		
Intersection Summary													
HCM 2000 Control Delay			11.6									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.69										
Actuated Cycle Length (s)			90.0									Sum of lost time (s)	9.0
Intersection Capacity Utilization			55.2%									ICU Level of Service	B
Analysis Period (min)			15										
c Critical Lane Group													

Lanes, Volumes, Timings
18: Hornby Road & "Street A"

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	0	0	40	65	245
Future Volume (vph)	50	0	0	40	65	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t						0.893
Fl _t Protected	0.950					
Satd. Flow (prot)	1770	0	0	1863	1663	0
Fl _t Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1663	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	145.7			1049.4	174.4	
Travel Time (s)	10.5			63.0	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	50	0	0	40	65	245
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	0	40	310	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type:	Other
Control Type:	Roundabout
Intersection Capacity Utilization	28.5%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 18: Hornby Road & "Street A"



















2026 Total AM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Right Turn Channelized						
Traffic Volume (veh/h)	50	0	0	40	65	245
Future Volume (veh/h)	50	0	0	40	65	245
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	0	0	40	65	245
Approach Volume (veh/h)	50			40	310	
Crossing Volume (veh/h)	65			50	0	
High Capacity (veh/h)	1316			1332	1385	
High v/c (veh/h)	0.04			0.03	0.22	
Low Capacity (veh/h)	1099			1113	1161	
Low v/c (veh/h)	0.05			0.04	0.27	
Intersection Summary						
Maximum v/c High			0.22			
Maximum v/c Low			0.27			
Intersection Capacity Utilization			28.5%		ICU Level of Service	A

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"



















2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Future Volume (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
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	1.00	1.00	1.00	1.00	1.00
Frt		0.940			0.964			0.940			0.995	
Flt Protected		0.973			0.964		0.950			0.950		
Satd. Flow (prot)	0	1655	0	0	1682	0	1719	1618	0	1719	1800	0
Flt Permitted		0.973			0.964		0.950			0.950		
Satd. Flow (perm)	0	1655	0	0	1682	0	1719	1618	0	1719	1800	0
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		207.1			712.3			126.5			32.6	
Travel Time (s)		14.9			51.3			5.7			1.5	
Peak Hour 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
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	14%	5%	5%	5%	5%
Adj. Flow (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	95	0	50	700	0	95	1825	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	110.6%						ICU Level of Service H					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

19: Trafalgar Road & "Street B"

2026 Total AM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	20	70	0	25	50	420	280	95	1765	60
Future Volume (Veh/h)	25	0	20	70	0	25	50	420	280	95	1765	60
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	25	0	20	70	0	25	50	420	280	95	1765	60
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	2530	2785	1795	2635	2675	560	1825			700		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2530	2785	1795	2635	2675	560	1825			700		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	80	0	100	95	85			89		
cM capacity (veh/h)	14	14	98	10	16	522	328			883		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	45	95	50	700	95	1825						
Volume Left	25	70	50	0	95	0						
Volume Right	20	25	0	280	0	60						
cSH	23	13	328	1700	883	1700						
Volume to Capacity	1.99	7.18	0.15	0.41	0.11	1.07						
Queue Length 95th (m)	45.9	Err	4.3	0.0	2.9	0.0						
Control Delay (s)	824.0	Err	18.0	0.0	9.6	0.0						
Lane LOS	F	F	C		A							
Approach Delay (s)	824.0	Err	1.2		0.5							
Approach LOS	F	F										
Intersection Summary												
Average Delay			351.9									
Intersection Capacity Utilization			110.6%		ICU Level of Service					H		
Analysis Period (min)			15									

Lanes, Volumes, Timings
20: Eighth Line & "Street B"

2026 Total AM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	40	155	160	825	120
Future Volume (vph)	30	40	155	160	825	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923			0.983		
Flt Protected	0.979			0.976		
Satd. Flow (prot)	1635	0	0	1792	1824	0
Flt Permitted	0.979			0.976		
Satd. Flow (perm)	1635	0	0	1792	1824	0
Link Speed (k/h)	50			70	70	
Link Distance (m)	712.3			618.0	2468.4	
Travel Time (s)	51.3			31.8	126.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	5%
Adj. Flow (vph)	30	40	155	160	825	120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	0	0	315	945	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	81.8%
ICU Level of Service	D
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 20: Eighth Line & "Street B"

2026 Total AM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	40	155	160	825	120
Future Volume (Veh/h)	30	40	155	160	825	120
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	40	155	160	825	120
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1355	885	945			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1355	885	945			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	88	78			
cM capacity (veh/h)	127	340	714			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	70	315	945			
Volume Left	30	155	0			
Volume Right	40	0	120			
cSH	198	714	1700			
Volume to Capacity	0.35	0.22	0.56			
Queue Length 95th (m)	12.0	6.6	0.0			
Control Delay (s)	32.8	7.0	0.0			
Lane LOS	D	A				
Approach Delay (s)	32.8	7.0	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			81.8%	ICU Level of Service	D	
Analysis Period (min)			15			

Lanes, Volumes, Timings

2026 Total PM

1: Brownridge Road/Fifth Line & Steeles Avenue

Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
Future Volume (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	145.0		65.0	30.0		0.0	20.0		0.0	25.0		25.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	100.0			100.0			20.0			75.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.850		0.999			0.887				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3085	1214	1203	3304	0	1687	1495	0	1583	1429	1568
Flt Permitted	0.104			0.372			0.754			0.731		
Satd. Flow (perm)	186	3085	1214	471	3304	0	1339	1495	0	1218	1429	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55		2			30				91
Link Speed (k/h)		60			60			50				50
Link Distance (m)		486.3			703.6			285.2				91.4
Travel Time (s)		29.2			42.2			20.5				6.6
Peak Hour 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
Heavy Vehicles (%)	6%	17%	33%	50%	9%	27%	7%	0%	17%	14%	33%	3%
Adj. Flow (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	735	5	5	1715	0	60	40	0	55	5	135
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(m)		3.6			3.6			3.6				3.6
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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(m)		9.4			9.4			9.4				9.4
Detector 2 Size(m)		0.6			0.6			0.6				0.6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	25.0	25.0	25.0	25.0	25.0		10.0	10.0		10.0	10.0	10.0

Lanes, Volumes, Timings
1: Brownridge Road/Fifth Line & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

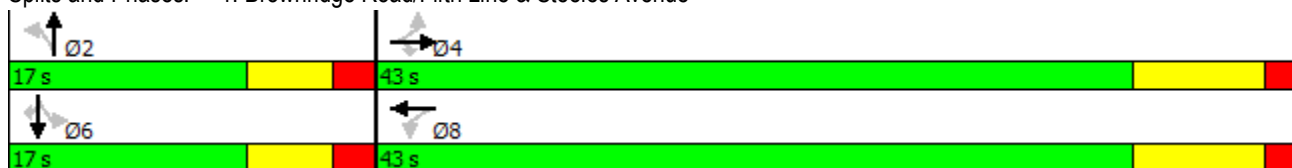


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	33.0	33.0	33.0	33.0	33.0		16.0	16.0		16.0	16.0	16.0
Total Split (s)	43.0	43.0	43.0	43.0	43.0		17.0	17.0		17.0	17.0	17.0
Total Split (%)	71.7%	71.7%	71.7%	71.7%	71.7%		28.3%	28.3%		28.3%	28.3%	28.3%
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0		11.0	11.0		11.0	11.0	11.0
Yellow Time (s)	6.0	6.0	6.0	6.0	6.0		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)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max		None	None		None	None	None
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)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	16.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	0
Act Effct Green (s)	40.2	40.2	40.2	40.2	40.2		10.2	10.2		10.2	10.2	10.2
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.68		0.17	0.17		0.17	0.17	0.17
v/c Ratio	0.52	0.35	0.01	0.02	0.77		0.26	0.14		0.26	0.02	0.39
Control Delay	29.9	6.4	0.0	5.4	12.9		24.7	12.2		25.1	20.6	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	29.9	6.4	0.0	5.4	12.9		24.7	12.2		25.1	20.6	13.0
LOS	C	A	A	A	B		C	B		C	C	B
Approach Delay		8.3			12.9			19.7			16.6	
Approach LOS		A			B			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	59.5
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	12.0
Intersection LOS:	B
Intersection Capacity Utilization:	80.8%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 1: Brownridge Road/Fifth Line & Steeles Avenue

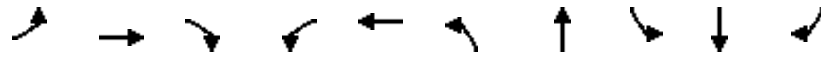


Queues

2026 Total PM

1: Brownridge Road/Fifth Line & Steeles Avenue

Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	65	735	5	5	1715	60	40	55	5	135
v/c Ratio	0.52	0.35	0.01	0.02	0.77	0.26	0.14	0.26	0.02	0.39
Control Delay	29.9	6.4	0.0	5.4	12.9	24.7	12.2	25.1	20.6	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	6.4	0.0	5.4	12.9	24.7	12.2	25.1	20.6	13.0
Queue Length 50th (m)	4.0	20.4	0.0	0.2	75.0	6.0	1.0	5.5	0.5	4.3
Queue Length 95th (m)	#24.1	31.6	0.0	1.4	#138.6	15.3	8.0	14.4	2.9	17.5
Internal Link Dist (m)		462.3			679.6		261.2		67.4	
Turn Bay Length (m)	145.0		65.0	30.0		20.0		25.0		25.0
Base Capacity (vph)	125	2086	838	318	2234	247	300	225	264	364
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	0.52	0.35	0.01	0.02	0.77	0.24	0.13	0.24	0.02	0.37

Intersection Summary























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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Brownridge Road/Fifth Line & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
Future Volume (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.89		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1703	3085	1214	1203	3303		1687	1496		1583	1429	1568
Flt Permitted	0.10	1.00	1.00	0.37	1.00		0.75	1.00		0.73	1.00	1.00
Satd. Flow (perm)	186	3085	1214	472	3303		1340	1496		1218	1429	1568
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	65	735	5	5	1700	15	60	10	30	55	5	135
RTOR Reduction (vph)	0	0	2	0	1	0	0	26	0	0	0	79
Lane Group Flow (vph)	65	735	3	5	1714	0	60	14	0	55	5	56
Heavy Vehicles (%)	6%	17%	33%	50%	9%	27%	7%	0%	17%	14%	33%	3%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	38.6	38.6	38.6	38.6	38.6		8.1	8.1		8.1	8.1	8.1
Effective Green, g (s)	38.6	38.6	38.6	38.6	38.6		8.1	8.1		8.1	8.1	8.1
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.64		0.13	0.13		0.13	0.13	0.13
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	118	1961	772	300	2100		178	199		162	190	209
v/s Ratio Prot		0.24			c0.52			0.01				0.00
v/s Ratio Perm	0.35		0.00	0.01			0.04			c0.05		0.04
v/c Ratio	0.55	0.37	0.00	0.02	0.82		0.34	0.07		0.34	0.03	0.27
Uniform Delay, d1	6.2	5.3	4.0	4.1	8.4		23.9	23.0		23.9	22.9	23.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	17.2	0.5	0.0	0.1	3.6		1.1	0.2		1.3	0.1	0.7
Delay (s)	23.4	5.8	4.0	4.2	12.0		25.0	23.2		25.1	22.9	24.3
Level of Service	C	A	A	A	B		C	C		C	C	C
Approach Delay (s)		7.2			12.0			24.3			24.5	
Approach LOS		A			B			C			C	
Intersection Summary												
HCM 2000 Control Delay			11.9			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			60.7			Sum of lost time (s)			14.0			
Intersection Capacity Utilization			80.8%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Fifth Line South & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Volume (vph)	840	5	5	1725	20	10
Future Volume (vph)	840	5	5	1725	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		30.0	60.0		15.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			100.0		30.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3085	1615	1203	3312	1687	1380
Flt Permitted			0.336		0.950	
Satd. Flow (perm)	3085	1615	426	3312	1687	1380
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		5				10
Link Speed (k/h)	60			60	60	
Link Distance (m)	703.6			479.7	556.9	
Travel Time (s)	42.2			28.8	33.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	17%	0%	50%	9%	7%	17%
Adj. Flow (vph)	840	5	5	1725	20	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	840	5	5	1725	20	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	10.0	2.0	2.0	10.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	0.6	2.0	2.0	0.6	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	25.0	25.0	25.0	25.0	10.0	10.0

Lanes, Volumes, Timings
2: Fifth Line South & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	33.0	33.0	33.0	33.0	16.0	16.0
Total Split (s)	44.0	44.0	44.0	44.0	16.0	16.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	26.7%	26.7%
Maximum Green (s)	36.0	36.0	36.0	36.0	10.0	10.0
Yellow Time (s)	6.0	6.0	6.0	6.0	4.0	4.0
All-Red Time (s)	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)	8.0	8.0	8.0	8.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	56.0	56.0	56.0	56.0	10.1	10.1
Actuated g/C Ratio	0.87	0.87	0.87	0.87	0.16	0.16
v/c Ratio	0.31	0.00	0.01	0.60	0.08	0.04
Control Delay	3.3	2.6	3.8	5.6	26.9	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.3	2.6	3.8	5.6	26.9	16.0
LOS	A	A	A	A	C	B
Approach Delay	3.2			5.6	23.2	
Approach LOS	A			A	C	

Intersection Summary

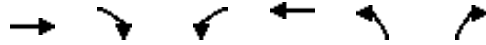
Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	64.5
Natural Cycle:	60
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.60
Intersection Signal Delay:	5.1
Intersection Capacity Utilization:	67.7%
Analysis Period (min):	15
Intersection LOS:	A
ICU Level of Service:	C

Splits and Phases: 2: Fifth Line South & Steeles Avenue



Queues
2: Fifth Line South & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	840	5	5	1725	20	10
v/c Ratio	0.31	0.00	0.01	0.60	0.08	0.04
Control Delay	3.3	2.6	3.8	5.6	26.9	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.3	2.6	3.8	5.6	26.9	16.0
Queue Length 50th (m)	0.0	0.0	0.0	0.0	1.9	0.0
Queue Length 95th (m)	34.2	0.9	1.2	105.6	8.3	4.0
Internal Link Dist (m)	679.6			455.7	532.9	
Turn Bay Length (m)		30.0	60.0		15.0	
Base Capacity (vph)	2677	1402	369	2874	264	224
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	0.31	0.00	0.01	0.60	0.08	0.04
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
 2: Fifth Line South & Steeles Avenue

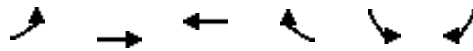
2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Volume (vph)	840	5	5	1725	20	10
Future Volume (vph)	840	5	5	1725	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3085	1615	1203	3312	1687	1380
Flt Permitted	1.00	1.00	0.34	1.00	0.95	1.00
Satd. Flow (perm)	3085	1615	425	3312	1687	1380
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	840	5	5	1725	20	10
RTOR Reduction (vph)	0	1	0	0	0	9
Lane Group Flow (vph)	840	4	5	1725	20	1
Heavy Vehicles (%)	17%	0%	50%	9%	7%	17%
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Actuated Green, G (s)	50.7	50.7	50.7	50.7	3.5	3.5
Effective Green, g (s)	50.7	50.7	50.7	50.7	3.5	3.5
Actuated g/C Ratio	0.74	0.74	0.74	0.74	0.05	0.05
Clearance Time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2293	1200	315	2462	86	70
v/s Ratio Prot	0.27			c0.52		
v/s Ratio Perm		0.00	0.01		c0.01	0.00
v/c Ratio	0.37	0.00	0.02	0.70	0.23	0.01
Uniform Delay, d1	3.1	2.3	2.3	4.7	31.1	30.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.0	0.1	1.7	1.4	0.0
Delay (s)	3.5	2.3	2.4	6.4	32.5	30.7
Level of Service	A	A	A	A	C	C
Approach Delay (s)	3.5			6.4	31.9	
Approach LOS	A			A	C	
Intersection Summary						
HCM 2000 Control Delay			5.7		HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			68.2		Sum of lost time (s)	14.0
Intersection Capacity Utilization			67.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
3: Steeles Avenue & Sixth Line

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	60	1130	1760	25	15	45
Future Volume (vph)	60	1130	1760	25	15	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	60.0			30.0	30.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				7.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Fr _t				0.850		0.850
Fl _t Protected	0.950				0.950	
Satd. Flow (prot)	1770	2983	3282	1524	1805	1615
Fl _t Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2983	3282	1524	1805	1615
Link Speed (k/h)		60	80		70	
Link Distance (m)		479.7	905.3		3066.1	
Travel Time (s)		28.8	40.7		157.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	21%	10%	6%	0%	0%
Adj. Flow (vph)	60	1130	1760	25	15	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	1130	1760	25	15	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

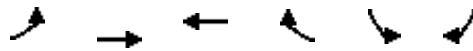
Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.9%
ICU Level of Service	B
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

3: Steeles Avenue & Sixth Line

























2026 Total PM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↙	↕↕	↕↕	↘	↙	↘		
Traffic Volume (veh/h)	60	1130	1760	25	15	45		
Future Volume (Veh/h)	60	1130	1760	25	15	45		
Sign Control		Free	Free		Stop			
Grade		0%	0%		0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	60	1130	1760	25	15	45		
Pedestrians								
Lane Width (m)								
Walking Speed (m/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		None	None					
Median storage veh								
Upstream signal (m)								
pX, platoon unblocked								
vC, conflicting volume	1785				2445	880		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1785				2445	880		
tC, single (s)	4.1				6.8	6.9		
tC, 2 stage (s)								
tF (s)	2.2				3.5	3.3		
p0 queue free %	83				32	85		
cM capacity (veh/h)	343				22	294		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	60	565	565	880	880	25	15	45
Volume Left	60	0	0	0	0	0	15	0
Volume Right	0	0	0	0	0	25	0	45
cSH	343	1700	1700	1700	1700	1700	22	294
Volume to Capacity	0.17	0.33	0.33	0.52	0.52	0.01	0.68	0.15
Queue Length 95th (m)	5.0	0.0	0.0	0.0	0.0	0.0	15.8	4.3
Control Delay (s)	17.7	0.0	0.0	0.0	0.0	0.0	333.3	19.4
Lane LOS	C						F	C
Approach Delay (s)	0.9	0.0			97.9			
Approach LOS							F	
Intersection Summary								
Average Delay	2.3							
Intersection Capacity Utilization	59.9%			ICU Level of Service			B	
Analysis Period (min)	15							

Lanes, Volumes, Timings
4: Sixth Line South/"Street A" & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

























												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Future Volume (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	30.0		30.0	60.0		30.0	30.0		0.0	30.0		60.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.886			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3085	1615	1736	2798	1583	1597	1591	0	1770	1712	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3085	1615	1736	2798	1583	1597	1591	0	1770	1712	0
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		905.3			497.0			169.8			447.0	
Travel Time (s)		40.7			22.4			12.2			32.2	
Peak Hour 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
Heavy Vehicles (%)	2%	17%	0%	4%	29%	2%	13%	2%	7%	2%	2%	2%
Adj. Flow (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	580	15	310	1280	45	30	165	0	165	335	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	74.6%
ICU Level of Service	D
Analysis Period (min)	15

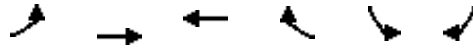
HCM Unsignalized Intersection Capacity Analysis
 4: Sixth Line South/"Street A" & Steeles Avenue

2026 Total PM
 Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	580	15	310	1280	45	30	40	125	165	155	180
Future Volume (Veh/h)	45	580	15	310	1280	45	30	40	125	165	155	180
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	45	580	15	310	1280	45	30	40	125	165	155	180
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1325			595			2188	2615	290	2425	2585	640
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1325			595			2188	2615	290	2425	2585	640
tC, single (s)	4.1			4.2			7.8	6.5	7.0	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.4	3.5	4.0	3.3
p0 queue free %	91			68			0	0	82	0	0	57
cM capacity (veh/h)	517			964			0	15	692	0	15	418
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	45	290	290	15	310	640	640	45	30	165	165	335
Volume Left	45	0	0	0	310	0	0	0	30	0	165	0
Volume Right	0	0	0	15	0	0	0	45	0	125	0	180
cSH	517	1700	1700	1700	964	1700	1700	1700	0	57	0	32
Volume to Capacity	0.09	0.17	0.17	0.01	0.32	0.38	0.38	0.03	Err	2.88	Err	10.44
Queue Length 95th (m)	2.3	0.0	0.0	0.0	11.2	0.0	0.0	0.0	Err	136.7	Err	Err
Control Delay (s)	12.6	0.0	0.0	0.0	10.5	0.0	0.0	0.0	Err	1002.7	Err	Err
Lane LOS	B				B				F	F	F	F
Approach Delay (s)	0.9				2.0				Err		Err	
Approach LOS									F		F	
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			74.6%		ICU Level of Service				D			
Analysis Period (min)			15									

Lanes, Volumes, Timings
5: Steeles Avenue & Hornby Road

2026 Total PM
Premier Gateway Phase 1B Employment Area



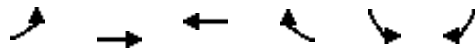
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	45	910	1570	35	60	90
Future Volume (vph)	45	910	1570	35	60	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	60.0			30.0	30.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				7.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1805	3034	3282	1615	1357	1615
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1805	3034	3282	1615	1357	1615
Link Speed (k/h)		60	60		60	
Link Distance (m)		497.0	179.1		1049.4	
Travel Time (s)		29.8	10.7		63.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	19%	10%	0%	33%	0%
Adj. Flow (vph)	45	910	1570	35	60	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	910	1570	35	60	90
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.6%
ICU Level of Service	B
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 5: Steeles Avenue & Hornby Road

























2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	45	910	1570	35	60	90		
Future Volume (Veh/h)	45	910	1570	35	60	90		
Sign Control		Free	Free		Stop			
Grade		0%	0%		0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	45	910	1570	35	60	90		
Pedestrians								
Lane Width (m)								
Walking Speed (m/s)								
Percent Blockage								
Right turn flare (veh)								
Median type								
		None	None					
Median storage veh								
Upstream signal (m)								
pX, platoon unblocked								
vC, conflicting volume	1605				2115	785		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1605				2115	785		
tC, single (s)	4.1				7.5	6.9		
tC, 2 stage (s)								
tF (s)	2.2				3.8	3.3		
p0 queue free %	89				0	74		
cM capacity (veh/h)	413				26	340		
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	45	455	455	785	785	35	60	90
Volume Left	45	0	0	0	0	0	60	0
Volume Right	0	0	0	0	0	35	0	90
cSH	413	1700	1700	1700	1700	1700	26	340
Volume to Capacity	0.11	0.27	0.27	0.46	0.46	0.02	2.28	0.26
Queue Length 95th (m)	2.9	0.0	0.0	0.0	0.0	0.0	58.4	8.4
Control Delay (s)	14.8	0.0	0.0	0.0	0.0	0.0	902.6	19.4
Lane LOS	B						F	C
Approach Delay (s)	0.7			0.0			372.6	
Approach LOS							F	
Intersection Summary								
Average Delay	20.9							
Intersection Capacity Utilization	55.6%			ICU Level of Service			B	
Analysis Period (min)	15							

Lanes, Volumes, Timings
6: Trafalgar Road & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
Future Volume (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	115.0		40.0	130.0		70.0	100.0		65.0	250.0		80.0
Storage Lanes	2		1	2		1	2		1	1		1
Taper Length (m)	100.0			100.0			80.0			100.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	2653	4510	1262	3433	4759	1583	3099	3505	1568	1805	3471	1129
Flt Permitted	0.950			0.950			0.950			0.142		
Satd. Flow (perm)	2653	4510	1262	3433	4759	1583	3099	3505	1568	270	3471	1129
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			201			159			521			193
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		382.9			311.3			332.0			289.5	
Travel Time (s)		23.0			18.7			17.1			14.9	
Peak Hour 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
Heavy Vehicles (%)	32%	15%	28%	2%	9%	2%	13%	3%	3%	0%	4%	43%
Adj. Flow (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
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(m)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	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	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	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	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	7.0	20.0	20.0

Lanes, Volumes, Timings
6: Trafalgar Road & Steeles Avenue

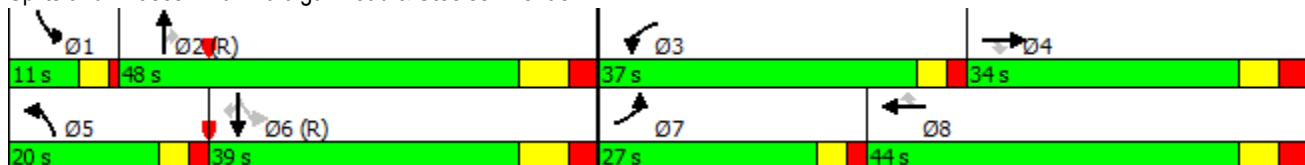
2026 Total PM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	12.0	27.0	27.0	13.0	27.0	27.0	13.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	27.0	34.0	34.0	37.0	44.0	44.0	20.0	48.0	48.0	11.0	39.0	39.0
Total Split (%)	20.8%	26.2%	26.2%	28.5%	33.8%	33.8%	15.4%	36.9%	36.9%	8.5%	30.0%	30.0%
Maximum Green (s)	22.0	27.0	27.0	32.0	37.0	37.0	15.0	40.0	40.0	7.0	31.0	31.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0	1.0	3.0	3.0
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	0.0
Total Lost Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	0.2
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	21.0	26.5	26.5	31.2	36.8	36.8	14.7	41.2	41.2	43.5	32.5	32.5
Actuated g/C Ratio	0.16	0.20	0.20	0.24	0.28	0.28	0.11	0.32	0.32	0.33	0.25	0.25
v/c Ratio	0.87	0.89	0.80	0.91	0.85	0.41	0.80	0.85	0.83	0.52	0.78	0.37
Control Delay	73.5	63.2	34.8	63.9	51.1	14.5	73.5	50.4	20.5	34.9	53.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.5	63.2	34.8	63.9	51.1	14.5	73.5	50.4	20.5	34.9	53.0	5.2
LOS	E	E	C	E	D	B	E	D	C	C	D	A
Approach Delay		59.5			51.7			42.8			43.0	
Approach LOS		E			D			D			D	

Intersection Summary













Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle:	95
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.91
Intersection Signal Delay:	49.6
Intersection LOS:	D
Intersection Capacity Utilization	90.0%
ICU Level of Service	E
Analysis Period (min)	15

Splits and Phases: 6: Trafalgar Road & Steeles Avenue



Queues
6: Trafalgar Road & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
v/c Ratio	0.87	0.89	0.80	0.91	0.85	0.41	0.80	0.85	0.83	0.52	0.78	0.37
Control Delay	73.5	63.2	34.8	63.9	51.1	14.5	73.5	50.4	20.5	34.9	53.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.5	63.2	34.8	63.9	51.1	14.5	73.5	50.4	20.5	34.9	53.0	5.2
Queue Length 50th (m)	50.2	79.1	35.7	101.0	106.7	14.4	38.4	127.1	51.9	14.5	91.2	0.0
Queue Length 95th (m)	#74.6	#101.0	#84.9	#134.4	125.9	37.7	#58.9	#157.8	#120.1	26.0	114.9	10.6
Internal Link Dist (m)		358.9			287.3			308.0			265.5	
Turn Bay Length (m)	115.0		40.0	130.0		70.0	100.0		65.0	250.0		80.0
Base Capacity (vph)	448	936	421	845	1359	565	357	1111	853	172	868	427
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.88	0.80	0.89	0.84	0.41	0.78	0.85	0.83	0.52	0.78	0.37


































Intersection Summary

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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
6: Trafalgar Road & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

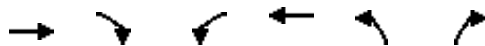
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	 			 	
Traffic Volume (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
Future Volume (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2653	4510	1262	3433	4759	1583	3099	3505	1568	1805	3471	1129
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.14	1.00	1.00
Satd. Flow (perm)	2653	4510	1262	3433	4759	1583	3099	3505	1568	271	3471	1129
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	370	820	335	750	1145	230	280	945	710	90	675	160
RTOR Reduction (vph)	0	0	160	0	0	114	0	0	356	0	0	120
Lane Group Flow (vph)	370	820	175	750	1145	116	280	945	354	90	675	40
Heavy Vehicles (%)	32%	15%	28%	2%	9%	2%	13%	3%	3%	0%	4%	43%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2	6		6
Actuated Green, G (s)	21.0	26.6	26.6	31.2	36.8	36.8	14.7	41.2	41.2	39.5	32.5	32.5
Effective Green, g (s)	21.0	26.6	26.6	31.2	36.8	36.8	14.7	41.2	41.2	39.5	32.5	32.5
Actuated g/C Ratio	0.16	0.20	0.20	0.24	0.28	0.28	0.11	0.32	0.32	0.30	0.25	0.25
Clearance Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	8.0
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	428	922	258	823	1347	448	350	1110	496	164	867	282
v/s Ratio Prot	0.14	0.18		c0.22	c0.24		c0.09	c0.27		0.03	0.19	
v/s Ratio Perm			0.14			0.07			0.23	0.14		0.04
v/c Ratio	0.86	0.89	0.68	0.91	0.85	0.26	0.80	0.85	0.71	0.55	0.78	0.14
Uniform Delay, d1	53.1	50.3	47.8	48.1	44.0	36.1	56.2	41.5	39.2	34.5	45.4	37.9
Progression 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
Incremental Delay, d2	16.4	10.5	6.9	14.4	5.3	0.3	12.9	8.3	8.5	3.7	6.8	1.1
Delay (s)	69.5	60.7	54.7	62.5	49.3	36.4	69.2	49.8	47.7	38.2	52.2	39.0
Level of Service	E	E	D	E	D	D	E	D	D	D	D	D
Approach Delay (s)		61.5			52.6			51.8			48.6	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			53.9			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			130.0			Sum of lost time (s)			25.0			
Intersection Capacity Utilization			90.0%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
7: Toronto Premier Outlets & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↘	↖
Traffic Volume (vph)	1545	50	30	1755	385	90
Future Volume (vph)	1545	50	30	1755	385	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		130.0	45.0		0.0	40.0
Storage Lanes		1	1		2	1
Taper Length (m)			80.0		7.5	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	4759	1482	1805	4893	3467	1599
Flt Permitted			0.125		0.950	
Satd. Flow (perm)	4759	1482	238	4893	3467	1599
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		50				90
Link Speed (k/h)	60			60	50	
Link Distance (m)	311.3			200.7	119.1	
Travel Time (s)	18.7			12.0	8.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	9%	9%	0%	6%	1%	1%
Adj. Flow (vph)	1545	50	30	1755	385	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1545	50	30	1755	385	90
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			7.2	7.2	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	10.0	2.0	2.0	10.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	0.6	2.0	2.0	0.6	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	20.0	20.0	6.0	20.0	10.0	10.0

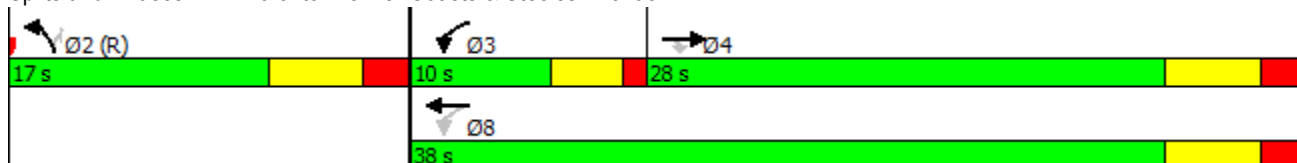


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	26.0	26.0	10.0	26.0	17.0	17.0
Total Split (s)	28.0	28.0	10.0	38.0	17.0	17.0
Total Split (%)	50.9%	50.9%	18.2%	69.1%	30.9%	30.9%
Maximum Green (s)	22.0	22.0	6.0	32.0	11.0	11.0
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Recall Mode	Max	Max	None	Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	17.0	17.0		17.0	21.0	21.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	28.0	28.0	34.0	32.0	11.0	11.0
Actuated g/C Ratio	0.51	0.51	0.62	0.58	0.20	0.20
v/c Ratio	0.64	0.06	0.09	0.62	0.56	0.23
Control Delay	12.7	4.1	4.7	8.7	23.3	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.7	4.1	4.7	8.7	23.3	7.0
LOS	B	A	A	A	C	A
Approach Delay	12.5			8.6	20.2	
Approach LOS	B			A	C	

Intersection Summary

Area Type:	Other
Cycle Length:	55
Actuated Cycle Length:	55
Offset:	0 (0%), Referenced to phase 2:NBL an 6:, Start of Green
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.64
Intersection Signal Delay:	11.6
Intersection LOS:	B
Intersection Capacity Utilization	54.9%
ICU Level of Service	A
Analysis Period (min)	15

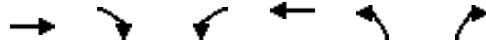
Splits and Phases: 7: Toronto Premier Outlets & Steeles Avenue



	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1545	50	30	1755	385	90
v/c Ratio	0.64	0.06	0.09	0.62	0.56	0.23
Control Delay	12.7	4.1	4.7	8.7	23.3	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.7	4.1	4.7	8.7	23.3	7.0
Queue Length 50th (m)	31.7	0.0	1.0	37.9	18.8	0.0
Queue Length 95th (m)	67.1	5.1	3.3	50.2	30.3	9.4
Internal Link Dist (m)	287.3			176.7	95.1	
Turn Bay Length (m)		130.0	45.0			40.0
Base Capacity (vph)	2422	779	318	2846	693	391
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	0.64	0.06	0.09	0.62	0.56	0.23
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
7: Toronto Premier Outlets & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↖	↗
Traffic Volume (vph)	1545	50	30	1755	385	90
Future Volume (vph)	1545	50	30	1755	385	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	1.00
Flt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	4759	1482	1805	4893	3467	1599
Flt Permitted	1.00	1.00	0.12	1.00	0.95	1.00
Satd. Flow (perm)	4759	1482	238	4893	3467	1599
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1545	50	30	1755	385	90
RTOR Reduction (vph)	0	25	0	0	0	76
Lane Group Flow (vph)	1545	25	30	1755	385	14
Heavy Vehicles (%)	9%	9%	0%	6%	1%	1%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	28.0	28.0	34.4	34.4	8.6	8.6
Effective Green, g (s)	28.0	28.0	34.4	34.4	8.6	8.6
Actuated g/C Ratio	0.51	0.51	0.63	0.63	0.16	0.16
Clearance Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Lane Grp Cap (vph)	2422	754	217	3060	542	250
v/s Ratio Prot	c0.32		0.01	c0.36	c0.11	
v/s Ratio Perm		0.02	0.08			0.01
v/c Ratio	0.64	0.03	0.14	0.57	0.71	0.06
Uniform Delay, d1	9.8	6.7	5.0	6.0	22.0	19.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.1	0.3	0.8	7.7	0.4
Delay (s)	11.1	6.8	5.3	6.8	29.7	20.2
Level of Service	B	A	A	A	C	C
Approach Delay (s)	11.0			6.8	27.9	
Approach LOS	B			A	C	
Intersection Summary						
HCM 2000 Control Delay			11.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			55.0		Sum of lost time (s)	16.0
Intersection Capacity Utilization			54.9%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
Future Volume (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	30.0		30.0	0.0		0.0	85.0		0.0
Storage Lanes	1		1	1		1	2		0	1		0
Taper Length (m)	55.0			90.0			7.5			45.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.882			0.886	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	4631	1615	1770	4848	1599	3367	1650	0	1752	1658	0
Flt Permitted	0.106			0.144			0.950			0.653		
Satd. Flow (perm)	201	4631	1615	268	4848	1599	3367	1650	0	1205	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			164		130				80
Link Speed (k/h)		60			60			50				70
Link Distance (m)		200.7			870.8			218.1				618.0
Travel Time (s)		12.0			52.2			15.7				31.8
Peak Hour 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
Heavy Vehicles (%)	0%	12%	0%	2%	7%	1%	4%	0%	2%	3%	0%	2%
Adj. Flow (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	285	1235	20	150	1740	230	70	165	0	235	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			7.2				7.2
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
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(m)		9.4			9.4			9.4				9.4
Detector 2 Size(m)		0.6			0.6			0.6				0.6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2				6
Permitted Phases	4		4	8		8				6		
Detector Phase	7	4	4	3	8	8	5	2		6		6
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	7.0	20.0	20.0	10.0	10.0		10.0	10.0	

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area

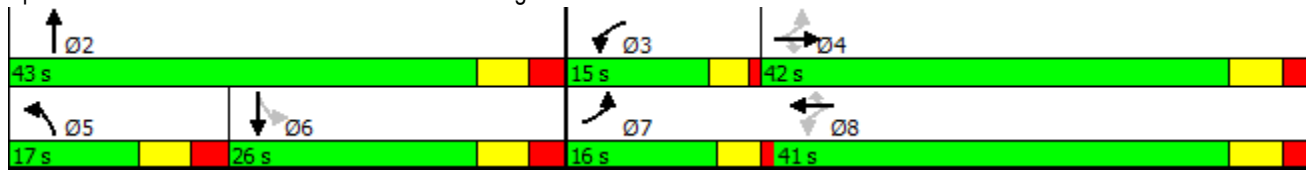


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	9.5	26.0	26.0	11.0	26.0	26.0	17.0	17.0		17.0	17.0	
Total Split (s)	16.0	42.0	42.0	15.0	41.0	41.0	17.0	43.0		26.0	26.0	
Total Split (%)	16.0%	42.0%	42.0%	15.0%	41.0%	41.0%	17.0%	43.0%		26.0%	26.0%	
Maximum Green (s)	11.5	36.0	36.0	11.0	35.0	35.0	10.0	36.0		19.0	19.0	
Yellow Time (s)	3.5	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	3.0	3.0		3.0	3.0	
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)	4.5	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2	0.2	4.0	4.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	None		Max	Max	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0				
Flash Dont Walk (s)		17.0	17.0		17.0	17.0		21.0				
Pedestrian Calls (#/hr)		0	0		0	0		0				
Act Effct Green (s)	50.8	37.8	37.8	46.6	35.2	35.2	10.1	32.2		19.1	19.1	
Actuated g/C Ratio	0.53	0.39	0.39	0.48	0.36	0.36	0.10	0.33		0.20	0.20	
v/c Ratio	0.96	0.68	0.03	0.55	0.99	0.33	0.20	0.26		0.99	0.27	
Control Delay	69.4	27.9	0.1	20.4	50.3	9.1	43.0	7.5		98.0	14.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	69.4	27.9	0.1	20.4	50.3	9.1	43.0	7.5		98.0	14.1	
LOS	E	C	A	C	D	A	D	A		F	B	
Approach Delay		35.2			43.7			18.1			72.1	
Approach LOS		D			D			B			E	

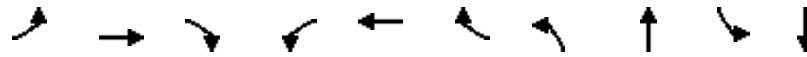
Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	96.6
Natural Cycle:	100
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.99
Intersection Signal Delay:	41.5
Intersection LOS:	D
Intersection Capacity Utilization:	92.7%
ICU Level of Service:	F
Analysis Period (min):	15

Splits and Phases: 8: Toronto Premium Outlets/Eighth Line & Steeles Avenue



8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	285	1235	20	150	1740	230	70	165	235	105
v/c Ratio	0.96	0.68	0.03	0.55	0.99	0.33	0.20	0.26	0.99	0.27
Control Delay	69.4	27.9	0.1	20.4	50.3	9.1	43.0	7.5	98.0	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.4	27.9	0.1	20.4	50.3	9.1	43.0	7.5	98.0	14.1
Queue Length 50th (m)	41.5	77.8	0.0	15.0	~139.4	9.0	6.9	4.6	~51.5	4.2
Queue Length 95th (m)	#97.7	97.1	0.0	26.6	#170.2	27.0	13.8	18.7	#99.3	18.7
Internal Link Dist (m)		176.7			846.8			194.1		594.0
Turn Bay Length (m)	105.0		55.0	30.0		30.0			85.0	
Base Capacity (vph)	297	1813	732	305	1766	687	350	699	237	391
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	0.68	0.03	0.49	0.99	0.33	0.20	0.24	0.99	0.27

Intersection Summary

~ 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.

HCM Signalized Intersection Capacity Analysis

2026 Total PM

8: Toronto Premium Outlets/Eighth Line & Steeles Avenue Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
Future Volume (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	4631	1615	1770	4848	1599	3367	1649		1752	1658	
Flt Permitted	0.11	1.00	1.00	0.14	1.00	1.00	0.95	1.00		0.65	1.00	
Satd. Flow (perm)	201	4631	1615	269	4848	1599	3367	1649		1204	1658	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	285	1235	20	150	1740	230	70	35	130	235	25	80
RTOR Reduction (vph)	0	0	12	0	0	105	0	85	0	0	64	0
Lane Group Flow (vph)	285	1235	8	150	1740	125	70	80	0	235	41	0
Heavy Vehicles (%)	0%	12%	0%	2%	7%	1%	4%	0%	2%	3%	0%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2				6
Permitted Phases	4		4	8		8				6		
Actuated Green, G (s)	49.5	37.9	37.9	44.6	35.2	35.2	7.7	33.8		19.1	19.1	
Effective Green, g (s)	49.5	37.9	37.9	44.6	35.2	35.2	7.7	33.8		19.1	19.1	
Actuated g/C Ratio	0.50	0.39	0.39	0.45	0.36	0.36	0.08	0.34		0.19	0.19	
Clearance Time (s)	4.5	6.0	6.0	4.0	6.0	6.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2	0.2	4.0	4.0		3.0	3.0	
Lane Grp Cap (vph)	291	1789	623	266	1739	573	264	568		234	322	
v/s Ratio Prot	c0.12	0.27		0.05	0.36		c0.02	0.05				0.02
v/s Ratio Perm	c0.38		0.00	0.20		0.08				c0.20		
v/c Ratio	0.98	0.69	0.01	0.56	1.00	0.22	0.27	0.14		1.00	0.13	
Uniform Delay, d1	27.4	25.2	18.6	17.0	31.4	21.9	42.5	22.1		39.5	32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	46.5	2.2	0.0	2.7	21.7	0.9	0.7	0.2		59.9	0.8	
Delay (s)	73.9	27.4	18.6	19.7	53.2	22.7	43.3	22.3		99.4	33.4	
Level of Service	E	C	B	B	D	C	D	C		F	C	
Approach Delay (s)		35.9			47.5			28.5			79.0	
Approach LOS		D			D			C			E	
Intersection Summary												
HCM 2000 Control Delay			44.8				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			98.1				Sum of lost time (s)			24.5		
Intersection Capacity Utilization			92.7%				ICU Level of Service			F		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
 9: Eighth Line South & Steeles Avenue

2026 Total PM
 Premier Gateway Phase 1B Employment Area

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (vph)	1560	5	0	2130	5	10
Future Volume (vph)	1560	5	0	2130	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	90.0		30.0	0.0
Storage Lanes		0	1		1	1
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Flt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	4710	0	1900	4893	1805	1346
Flt Permitted					0.950	
Satd. Flow (perm)	4710	0	1900	4893	1805	1346
Link Speed (k/h)	70			70	50	
Link Distance (m)	870.8			525.4	458.2	
Travel Time (s)	44.8			27.0	33.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	50%	0%	6%	0%	20%
Adj. Flow (vph)	1560	5	0	2130	5	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1565	0	0	2130	5	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	51.2% ICU Level of Service A
Analysis Period (min)	15

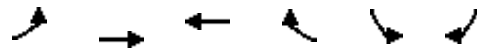
HCM Unsignalized Intersection Capacity Analysis
 9: Eighth Line South & Steeles Avenue

2026 Total PM
 Premier Gateway Phase 1B Employment Area

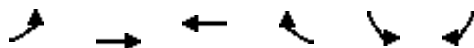
	→	↘	↙	←	↖	↗					
Movement	EBT	EBR	WBL	WBT	NBL	NBR					
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗					
Traffic Volume (veh/h)	1560	5	0	2130	5	10					
Future Volume (Veh/h)	1560	5	0	2130	5	10					
Sign Control	Free			Free	Stop						
Grade	0%			0%	0%						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00					
Hourly flow rate (vph)	1560	5	0	2130	5	10					
Pedestrians											
Lane Width (m)											
Walking Speed (m/s)											
Percent Blockage											
Right turn flare (veh)											
Median type	None			None							
Median storage veh											
Upstream signal (m)											
pX, platoon unblocked											
vC, conflicting volume				1565			2272	522			
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol				1565			2272	522			
tC, single (s)				4.1			6.8	7.3			
tC, 2 stage (s)											
tF (s)				2.2			3.5	3.5			
p0 queue free %				100			86	98			
cM capacity (veh/h)				428			35	455			
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2		
Volume Total	624	624	317	0	710	710	710	5	10		
Volume Left	0	0	0	0	0	0	0	5	0		
Volume Right	0	0	5	0	0	0	0	0	10		
cSH	1700	1700	1700	1700	1700	1700	1700	35	455		
Volume to Capacity	0.37	0.37	0.19	0.00	0.42	0.42	0.42	0.14	0.02		
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.5		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	124.7	13.1		
Lane LOS								F	B		
Approach Delay (s)	0.0			0.0				50.3			
Approach LOS								F			
Intersection Summary											
Average Delay				0.2							
Intersection Capacity Utilization				51.2%		ICU Level of Service				A	
Analysis Period (min)				15							

Lanes, Volumes, Timings
10: Steeles Avenue & Ninth Line

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	135	1470	2005	920	350	90
Future Volume (vph)	135	1470	2005	920	350	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	65.0			75.0	90.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	100.0				40.0	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1719	4673	3406	1615	3367	1524
Flt Permitted	0.054				0.950	
Satd. Flow (perm)	98	4673	3406	1615	3367	1524
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				806		90
Link Speed (k/h)		70	70		70	
Link Distance (m)		525.4	169.8		3120.2	
Travel Time (s)		27.0	8.7		160.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	11%	6%	0%	4%	6%
Adj. Flow (vph)	135	1470	2005	920	350	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	135	1470	2005	920	350	90
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.6	3.6		7.2	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	2.0	10.0	10.0	2.0	2.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	0.6	2.0	2.0	2.0
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	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
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	6
Switch Phase						
Minimum Initial (s)	7.0	20.0	20.0	20.0	10.0	10.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	11.0	27.0	27.0	27.0	17.0	17.0
Total Split (s)	11.0	88.0	77.0	77.0	22.0	22.0
Total Split (%)	10.0%	80.0%	70.0%	70.0%	20.0%	20.0%
Maximum Green (s)	7.0	81.0	70.0	70.0	15.0	15.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Recall Mode	None	Max	Max	Max	Max	Max
Act Effct Green (s)	84.0	81.0	70.0	70.0	15.0	15.0
Actuated g/C Ratio	0.76	0.74	0.64	0.64	0.14	0.14
v/c Ratio	0.76	0.43	0.93	0.70	0.76	0.32
Control Delay	46.8	6.0	26.7	4.7	57.6	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	6.0	26.7	4.7	57.6	12.2
LOS	D	A	C	A	E	B
Approach Delay		9.5	19.8		48.3	
Approach LOS		A	B		D	

Intersection Summary

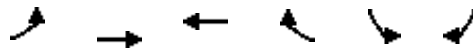
Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	19.0
Intersection LOS:	B
Intersection Capacity Utilization:	87.9%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 10: Steeles Avenue & Ninth Line



Queues
10: Steeles Avenue & Ninth Line

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	135	1470	2005	920	350	90
v/c Ratio	0.76	0.43	0.93	0.70	0.76	0.32
Control Delay	46.8	6.0	26.7	4.7	57.6	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	6.0	26.7	4.7	57.6	12.2
Queue Length 50th (m)	13.4	40.2	194.0	9.3	39.8	0.0
Queue Length 95th (m)	#45.4	47.6	#247.0	31.9	#59.1	14.7
Internal Link Dist (m)		501.4	145.8		3096.2	
Turn Bay Length (m)	65.0			75.0	90.0	
Base Capacity (vph)	177	3441	2167	1320	459	285
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	0.76	0.43	0.93	0.70	0.76	0.32

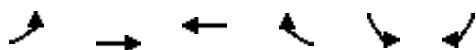
Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

10: Steeles Avenue & Ninth Line

2026 Total PM
Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↵	↑↑↑↑	↑↑	↵	↵↵	↵
Traffic Volume (vph)	135	1470	2005	920	350	90
Future Volume (vph)	135	1470	2005	920	350	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Flt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	4673	3406	1615	3367	1524
Flt Permitted	0.05	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	98	4673	3406	1615	3367	1524
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	135	1470	2005	920	350	90
RTOR Reduction (vph)	0	0	0	293	0	78
Lane Group Flow (vph)	135	1470	2005	627	350	12
Heavy Vehicles (%)	5%	11%	6%	0%	4%	6%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	81.0	81.0	70.0	70.0	15.0	15.0
Effective Green, g (s)	81.0	81.0	70.0	70.0	15.0	15.0
Actuated g/C Ratio	0.74	0.74	0.64	0.64	0.14	0.14
Clearance Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Lane Grp Cap (vph)	175	3441	2167	1027	459	207
v/s Ratio Prot	c0.05	0.31	c0.59		c0.10	
v/s Ratio Perm	0.52			0.39		0.01
v/c Ratio	0.77	0.43	0.93	0.61	0.76	0.06
Uniform Delay, d1	30.1	5.6	17.7	11.9	45.8	41.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.7	0.4	8.3	2.7	11.4	0.5
Delay (s)	48.8	6.0	25.9	14.6	57.2	41.9
Level of Service	D	A	C	B	E	D
Approach Delay (s)		9.6	22.4		54.0	
Approach LOS		A	C		D	
Intersection Summary						
HCM 2000 Control Delay			21.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.89			
Actuated Cycle Length (s)			110.0		Sum of lost time (s)	18.0
Intersection Capacity Utilization			87.9%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
11: Trafalgar Rd & Hornby Rd

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	10	5	1545	570	155
Future Volume (vph)	325	10	5	1545	570	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	100.0			0.0
Storage Lanes	1	0	0			0
Taper Length (m)	7.5		100.0			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996				0.971	
Flt Protected	0.954					
Satd. Flow (prot)	1805	0	0	1863	1816	0
Flt Permitted	0.954					
Satd. Flow (perm)	1805	0	0	1863	1816	0
Link Speed (k/h)	60			80	80	
Link Distance (m)	54.4			135.9	215.8	
Travel Time (s)	3.3			6.1	9.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Adj. Flow (vph)	325	10	5	1545	570	155
Shared Lane Traffic (%)						
Lane Group Flow (vph)	335	0	0	1550	725	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	110.6%
ICU Level of Service	H
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 11: Trafalgar Rd & Hornby Rd

















2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	325	10	5	1545	570	155
Future Volume (Veh/h)	325	10	5	1545	570	155
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	325	10	5	1545	570	155
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	2202	648	570			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2202	648	570			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	98	100			
cM capacity (veh/h)	49	474	1013			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	335	1550	725			
Volume Left	325	5	0			
Volume Right	10	0	155			
cSH	51	1013	1700			
Volume to Capacity	6.59	0.00	0.43			
Queue Length 95th (m)	Err	0.1	0.0			
Control Delay (s)	Err	0.5	0.0			
Lane LOS	F	A				
Approach Delay (s)	Err	0.5	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			1283.7			
Intersection Capacity Utilization			110.6%	ICU Level of Service	H	
Analysis Period (min)			15			

Lanes, Volumes, Timings
12: Fifth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	280	5	20	605	25	10	50	30	5	35	20
Future Volume (vph)	45	280	5	20	605	25	10	50	30	5	35	20
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	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.995			0.955			0.955	
Flt Protected		0.993			0.998			0.994			0.996	
Satd. Flow (prot)	0	1852	0	0	1835	0	0	1742	0	0	1710	0
Flt Permitted		0.993			0.998			0.994			0.996	
Satd. Flow (perm)	0	1852	0	0	1835	0	0	1742	0	0	1710	0
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		320.1			648.3			2473.7			211.2	
Travel Time (s)		19.2			38.9			127.2			10.9	
Peak Hour 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
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	17%	0%	5%	0%	0%	17%
Adj. Flow (vph)	45	280	5	20	605	25	10	50	30	5	35	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	330	0	0	650	0	0	90	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	

















Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.5%
ICU Level of Service	A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

















12: Fifth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	280	5	20	605	25	10	50	30	5	35	20
Future Volume (Veh/h)	45	280	5	20	605	25	10	50	30	5	35	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	45	280	5	20	605	25	10	50	30	5	35	20
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	630			285			1068	1042	282	1085	1032	618
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	630			285			1068	1042	282	1085	1032	618
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.5	6.4
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.0	3.5
p0 queue free %	95			98			93	77	96	97	84	96
cM capacity (veh/h)	962			1289			150	217	749	148	220	463
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	330	650	90	60								
Volume Left	45	20	10	5								
Volume Right	5	25	30	20								
cSH	962	1289	267	254								
Volume to Capacity	0.05	0.02	0.34	0.24								
Queue Length 95th (m)	1.2	0.4	11.5	7.2								
Control Delay (s)	1.7	0.4	25.2	23.5								
Lane LOS	A	A	D	C								
Approach Delay (s)	1.7	0.4	25.2	23.5								
Approach LOS			D	C								
Intersection Summary												
Average Delay			4.0									
Intersection Capacity Utilization			50.5%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings
13: Sixth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	275	5	15	670	25	10	40	20	10	20	10
Future Volume (vph)	5	275	5	15	670	25	10	40	20	10	20	10
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	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.995			0.961			0.966	
Flt Protected		0.999			0.999			0.993			0.988	
Satd. Flow (prot)	0	1836	0	0	1784	0	0	1729	0	0	1769	0
Flt Permitted		0.999			0.999			0.993			0.988	
Satd. Flow (perm)	0	1836	0	0	1784	0	0	1729	0	0	1769	0
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		620.4			640.8			3066.1			190.9	
Travel Time (s)		37.2			38.4			157.7			9.8	
Peak Hour 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
Heavy Vehicles (%)	14%	3%	1%	0%	5%	33%	0%	0%	17%	10%	0%	0%
Adj. Flow (vph)	5	275	5	15	670	25	10	40	20	10	20	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	285	0	0	710	0	0	70	0	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	55.9%						ICU Level of Service B					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
 13: Sixth Line & 5 Side Road

2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	5	275	5	15	670	25	10	40	20	10	20	10
Future Volume (Veh/h)	5	275	5	15	670	25	10	40	20	10	20	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	5	275	5	15	670	25	10	40	20	10	20	10
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	695			280			1020	1012	278	1040	1002	682
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	695			280			1020	1012	278	1040	1002	682
tC, single (s)	4.2			4.1			7.1	6.5	6.4	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.5	3.6	4.0	3.3
p0 queue free %	99			99			95	83	97	94	92	98
cM capacity (veh/h)	847			1294			196	237	727	168	240	453
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	285	710	70	40								
Volume Left	5	15	10	10								
Volume Right	5	25	20	10								
cSH	847	1294	283	243								
Volume to Capacity	0.01	0.01	0.25	0.16								
Queue Length 95th (m)	0.1	0.3	7.6	4.6								
Control Delay (s)	0.2	0.3	21.9	22.7								
Lane LOS	A	A	C	C								
Approach Delay (s)	0.2	0.3	21.9	22.7								
Approach LOS			C	C								
Intersection Summary												
Average Delay			2.5									
Intersection Capacity Utilization			55.9%		ICU Level of Service				B			
Analysis Period (min)			15									

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Future Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		40.0	40.0		0.0	40.0		0.0	50.0		20.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	80.0			80.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.985			0.989				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1656	3539	1482	1805	3556	0	1770	3442	0	1583	3438	1509
Flt Permitted	0.263			0.632			0.285			0.077		
Satd. Flow (perm)	458	3539	1482	1201	3556	0	531	3442	0	128	3438	1509
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		12			15				85
Link Speed (k/h)		60			60			80			80	
Link Distance (m)		223.8			665.2			264.1			262.0	
Travel Time (s)		13.4			39.9			11.9			11.8	
Peak Hour 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
Heavy Vehicles (%)	9%	2%	9%	0%	0%	0%	2%	4%	0%	14%	5%	7%
Adj. Flow (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	190	75	90	495	0	185	1885	0	10	800	80
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(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	15.0	15.0		7.0	25.0		7.0	25.0	25.0

Lanes, Volumes, Timings
14: Trafalgar Rd & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		11.0	31.0		11.0	31.0	31.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0		13.0	57.0		11.0	55.0	55.0
Total Split (%)	24.4%	24.4%	24.4%	24.4%	24.4%		14.4%	63.3%		12.2%	61.1%	61.1%
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0		9.0	51.0		7.0	49.0	49.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		1.0	2.0		1.0	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		4.0	6.0		4.0	6.0	6.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0		3.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	Max		None	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)	25.0	25.0	25.0	25.0	25.0			20.0			20.0	20.0
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	0
Act Effct Green (s)	15.8	15.8	15.8	15.8	15.8		63.1	59.3		58.0	49.0	49.0
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18		0.71	0.66		0.65	0.55	0.55
v/c Ratio	0.81	0.30	0.23	0.42	0.77		0.38	0.82		0.05	0.42	0.09
Control Delay	97.3	33.6	8.2	39.9	43.7		6.5	16.3		4.6	12.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	97.3	33.6	8.2	39.9	43.7		6.5	16.3		4.6	12.8	2.5
LOS	F	C	A	D	D		A	B		A	B	A
Approach Delay		40.4			43.1			15.4			11.8	
Approach LOS		D			D			B			B	

Intersection Summary

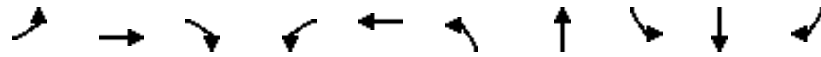
Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	89.3
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	20.9
Intersection LOS:	C
Intersection Capacity Utilization:	103.2%
ICU Level of Service:	G
Analysis Period (min):	15

Splits and Phases: 14: Trafalgar Rd & 5 Side Road



Queues
14: Trafalgar Rd & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	65	190	75	90	495	185	1885	10	800	80
v/c Ratio	0.81	0.30	0.23	0.42	0.77	0.38	0.82	0.05	0.42	0.09
Control Delay	97.3	33.6	8.2	39.9	43.7	6.5	16.3	4.6	12.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.3	33.6	8.2	39.9	43.7	6.5	16.3	4.6	12.8	2.5
Queue Length 50th (m)	11.5	16.0	0.0	14.7	44.4	9.2	106.5	0.5	42.7	0.0
Queue Length 95th (m)	#35.7	26.1	10.1	29.9	#63.7	15.7	#226.3	1.8	56.5	5.8
Internal Link Dist (m)		199.8			641.2		240.1		238.0	
Turn Bay Length (m)	40.0		40.0	40.0		40.0		50.0		20.0
Base Capacity (vph)	82	634	335	215	647	500	2291	197	1886	866
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	0.79	0.30	0.22	0.42	0.77	0.37	0.82	0.05	0.42	0.09

Intersection Summary























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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

14: Trafalgar Rd & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Future Volume (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1656	3539	1482	1805	3555		1770	3443		1583	3438	1509
Flt Permitted	0.26	1.00	1.00	0.63	1.00		0.29	1.00		0.08	1.00	1.00
Satd. Flow (perm)	458	3539	1482	1201	3555		531	3443		128	3438	1509
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	65	190	75	90	445	50	185	1750	135	10	800	80
RTOR Reduction (vph)	0	0	62	0	10	0	0	5	0	0	0	35
Lane Group Flow (vph)	65	190	13	90	485	0	185	1880	0	10	800	45
Heavy Vehicles (%)	9%	2%	9%	0%	0%	0%	2%	4%	0%	14%	5%	7%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	15.8	15.8	15.8	15.8	15.8		64.7	59.3		53.6	52.2	52.2
Effective Green, g (s)	15.8	15.8	15.8	15.8	15.8		64.7	59.3		53.6	52.2	52.2
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17		0.70	0.64		0.58	0.56	0.56
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)	78	604	253	205	607		485	2207		96	1940	851
v/s Ratio Prot		0.05			0.14		c0.04	c0.55		0.00	0.23	
v/s Ratio Perm	c0.14		0.01	0.07			0.23			0.06		0.03
v/c Ratio	0.83	0.31	0.05	0.44	0.80		0.38	0.85		0.10	0.41	0.05
Uniform Delay, d1	37.1	33.6	32.1	34.4	36.8		5.5	13.1		12.5	11.4	9.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	54.5	0.6	0.2	3.1	8.3		0.5	4.4		0.5	0.6	0.1
Delay (s)	91.6	34.2	32.3	37.5	45.1		6.0	17.5		13.0	12.1	9.2
Level of Service	F	C	C	D	D		A	B		B	B	A
Approach Delay (s)		45.1			44.0			16.5			11.8	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay	22.0			HCM 2000 Level of Service				C				
HCM 2000 Volume to Capacity ratio	0.85											
Actuated Cycle Length (s)	92.5			Sum of lost time (s)				16.0				
Intersection Capacity Utilization	103.2%			ICU Level of Service				G				
Analysis Period (min)	15											
c Critical Lane Group												

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↕			↕	
Traffic Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Future Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.979			0.979			0.975	
Flt Protected		0.989			0.997						0.995	
Satd. Flow (prot)	0	3448	0	0	3466	0	0	1830	0	0	1830	0
Flt Permitted		0.684			0.902			0.998			0.923	
Satd. Flow (perm)	0	2385	0	0	3136	0	0	1827	0	0	1697	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			41			25			30	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		643.4			668.7			2468.4			454.5	
Travel Time (s)		38.6			40.1			126.9			23.4	
Peak Hour 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
Heavy Vehicles (%)	5%	2%	22%	11%	1%	1%	0%	1%	5%	0%	0%	4%
Adj. Flow (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	400	0	0	675	0	0	635	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.6	22.6		22.6	22.6		27.4	27.4		27.4	27.4	
Total Split (%)	45.2%	45.2%		45.2%	45.2%		54.8%	54.8%		54.8%	54.8%	

Lanes, Volumes, Timings
15: Eighth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

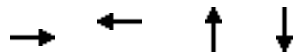
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	18.1	18.1		18.1	18.1		22.9	22.9		22.9	22.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		14.2			14.2			23.0			23.0	
Actuated g/C Ratio		0.31			0.31			0.50			0.50	
v/c Ratio		0.54			0.68			0.69			0.29	
Control Delay		15.9			16.8			14.9			7.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.9			16.8			14.9			7.9	
LOS		B			B			B			A	
Approach Delay		15.9			16.8			14.9			7.9	
Approach LOS		B			B			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	50
Actuated Cycle Length:	46.3
Natural Cycle:	50
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.69
Intersection Signal Delay:	14.9
Intersection LOS:	B
Intersection Capacity Utilization	76.6%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 15: Eighth Line & 5 Side Road





Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	400	675	635	245
v/c Ratio	0.54	0.68	0.69	0.29
Control Delay	15.9	16.8	14.9	7.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.9	16.8	14.9	7.9
Queue Length 50th (m)	14.3	24.1	35.5	9.5
Queue Length 95th (m)	24.6	38.1	#93.6	23.5
Internal Link Dist (m)	619.4	644.7	2444.4	430.5
Turn Bay Length (m)				
Base Capacity (vph)	940	1257	920	858
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	0.43	0.54	0.69	0.29

Intersection Summary

















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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

15: Eighth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Future Volume (vph)	85	305	10	45	535	95	5	530	100	25	175	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.5	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		1.00			0.98			0.98			0.98	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3450			3464			1829			1830	
Flt Permitted		0.68			0.90			1.00			0.92	
Satd. Flow (perm)		2384			3137			1826			1698	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	85	305	10	45	535	95	5	530	100	25	175	45
RTOR Reduction (vph)	0	4	0	0	28	0	0	13	0	0	15	0
Lane Group Flow (vph)	0	396	0	0	647	0	0	622	0	0	230	0
Heavy Vehicles (%)	5%	2%	22%	11%	1%	1%	0%	1%	5%	0%	0%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.2			14.2			23.0			23.0	
Effective Green, g (s)		14.2			14.2			23.0			23.0	
Actuated g/C Ratio		0.31			0.31			0.50			0.50	
Clearance Time (s)		4.5			4.5			4.5			4.5	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		732			964			909			845	
v/s Ratio Prot												
v/s Ratio Perm		0.17			0.21			0.34			0.14	
v/c Ratio		0.54			0.67			0.68			0.27	
Uniform Delay, d1		13.3			14.0			8.8			6.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			1.8			4.2			0.8	
Delay (s)		14.1			15.8			13.0			7.5	
Level of Service		B			B			B			A	
Approach Delay (s)		14.1			15.8			13.0			7.5	
Approach LOS		B			B			B			A	
Intersection Summary												
HCM 2000 Control Delay			13.5					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			46.2					Sum of lost time (s)		9.0		
Intersection Capacity Utilization			76.6%					ICU Level of Service		D		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
16: Ninth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	350	20	10	625	295	20	985	15	35	400	30
Future Volume (vph)	35	350	20	10	625	295	20	985	15	35	400	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	40.0		40.0	40.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.992				0.850		0.998			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3581	0	1805	3610	1615	1805	3601	0	1805	3541	0
Flt Permitted	0.381			0.532			0.502			0.216		
Satd. Flow (perm)	703	3581	0	1011	3610	1615	954	3601	0	410	3541	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13				65		4			18	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		580.9			458.3			3120.2			329.9	
Travel Time (s)		34.9			27.5			160.5			17.0	
Peak Hour 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
Heavy Vehicles (%)	3%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%
Adj. Flow (vph)	35	350	20	10	625	295	20	985	15	35	400	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	370	0	10	625	295	20	1000	0	35	430	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	20.0	20.0		20.0	20.0	

Lanes, Volumes, Timings
16: Ninth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	24.0	24.0		24.0	24.0	24.0	26.0	26.0		26.0	26.0	
Total Split (s)	24.0	24.0		24.0	24.0	24.0	26.0	26.0		26.0	26.0	
Total Split (%)	48.0%	48.0%		48.0%	48.0%	48.0%	52.0%	52.0%		52.0%	52.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	20.0	20.0		20.0	20.0	
Yellow Time (s)	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	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	3.5		3.5	3.5	3.5	5.5	5.5		5.5	5.5	
Recall Mode	None	None		None	None	None	Max	Max		Max	Max	
Walk Time (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Flash Dont Walk (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)	14.5	14.5		14.5	14.5	14.5	20.1	20.1		20.1	20.1	
Actuated g/C Ratio	0.31	0.31		0.31	0.31	0.31	0.43	0.43		0.43	0.43	
v/c Ratio	0.16	0.33		0.03	0.56	0.54	0.05	0.64		0.20	0.28	
Control Delay	13.2	12.4		10.8	15.3	14.0	9.6	13.5		13.2	9.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	13.2	12.4		10.8	15.3	14.0	9.6	13.5		13.2	9.5	
LOS	B	B		B	B	B	A	B		B	A	
Approach Delay		12.5			14.8			13.4			9.8	
Approach LOS		B			B			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 46.7

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 13.2

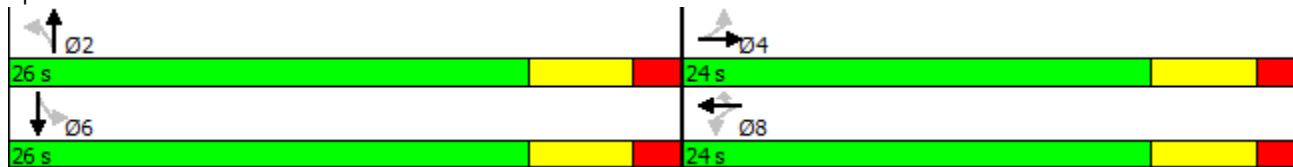
Intersection LOS: B

Intersection Capacity Utilization 67.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 16: Ninth Line & 5 Side Road




























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	35	370	10	625	295	20	1000	35	430
v/c Ratio	0.16	0.33	0.03	0.56	0.54	0.05	0.64	0.20	0.28
Control Delay	13.2	12.4	10.8	15.3	14.0	9.6	13.5	13.2	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	12.4	10.8	15.3	14.0	9.6	13.5	13.2	9.5
Queue Length 50th (m)	2.1	12.0	0.6	23.0	15.5	1.0	34.2	1.8	11.5
Queue Length 95th (m)	7.2	20.2	3.0	35.2	33.1	4.3	56.8	7.6	21.5
Internal Link Dist (m)		556.9		434.3			3096.2		305.9
Turn Bay Length (m)	40.0		40.0		40.0	40.0		40.0	
Base Capacity (vph)	272	1395	391	1398	665	410	1552	176	1534
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	0.13	0.27	0.03	0.45	0.44	0.05	0.64	0.20	0.28

Intersection Summary

HCM Signalized Intersection Capacity Analysis

16: Ninth Line & 5 Side Road

2026 Total PM
Premier Gateway Phase 1B Employment Area

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	35	350	20	10	625	295	20	985	15	35	400	30	
Future Volume (vph)	35	350	20	10	625	295	20	985	15	35	400	30	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0		
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95		
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00		1.00	0.99		
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1752	3581		1805	3610	1615	1805	3600		1805	3539		
Flt Permitted	0.38	1.00		0.53	1.00	1.00	0.50	1.00		0.22	1.00		
Satd. Flow (perm)	703	3581		1010	3610	1615	953	3600		410	3539		
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. Flow (vph)	35	350	20	10	625	295	20	985	15	35	400	30	
RTOR Reduction (vph)	0	9	0	0	0	45	0	2	0	0	10	0	
Lane Group Flow (vph)	35	361	0	10	625	250	20	998	0	35	420	0	
Heavy Vehicles (%)	3%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA		
Protected Phases		4			8			2				6	
Permitted Phases	4			8		8	2			6			
Actuated Green, G (s)	14.5	14.5		14.5	14.5	14.5	20.1	20.1		20.1	20.1		
Effective Green, g (s)	14.5	14.5		14.5	14.5	14.5	20.1	20.1		20.1	20.1		
Actuated g/C Ratio	0.31	0.31		0.31	0.31	0.31	0.43	0.43		0.43	0.43		
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0		
Vehicle Extension (s)	3.5	3.5		3.5	3.5	3.5	5.5	5.5		5.5	5.5		
Lane Grp Cap (vph)	218	1114		314	1123	502	411	1552		176	1526		
v/s Ratio Prot		0.10			0.17			0.28				0.12	
v/s Ratio Perm	0.05			0.01		0.15	0.02			0.09			
v/c Ratio	0.16	0.32		0.03	0.56	0.50	0.05	0.64		0.20	0.28		
Uniform Delay, d1	11.6	12.3		11.2	13.4	13.1	7.7	10.4		8.2	8.5		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2	0.4	0.2		0.0	0.7	0.9	0.2	2.1		2.5	0.4		
Delay (s)	12.0	12.5		11.2	14.0	14.0	7.9	12.5		10.8	9.0		
Level of Service	B	B		B	B	B	A	B		B	A		
Approach Delay (s)		12.5			14.0			12.4			9.1		
Approach LOS		B			B			B			A		
Intersection Summary													
HCM 2000 Control Delay			12.4									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.61										
Actuated Cycle Length (s)			46.6									Sum of lost time (s)	12.0
Intersection Capacity Utilization			67.2%									ICU Level of Service	C
Analysis Period (min)			15										
c Critical Lane Group													

Lanes, Volumes, Timings
17: "Street C"/"Street B" & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
Future Volume (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	30.0		30.0	60.0		30.0	30.0		100.0	30.0		0.0
Storage Lanes	1		1	2		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1770	1863	1583	1770	1583	0
Flt Permitted	0.230			0.230			0.731			0.757		
Satd. Flow (perm)	428	5085	1583	831	5085	1583	1362	1863	1583	1410	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			45			70			36		36	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		317.8			382.9			215.0			231.4	
Travel Time (s)		19.1			23.0			15.5			16.7	
Peak Hour 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
Adj. Flow (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	1425	45	160	1515	70	210	0	530	100	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	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	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	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	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm		Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	8	8	8	2	2	2	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	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	

Lanes, Volumes, Timings
 17: "Street C"/"Street B" & Steeles Avenue

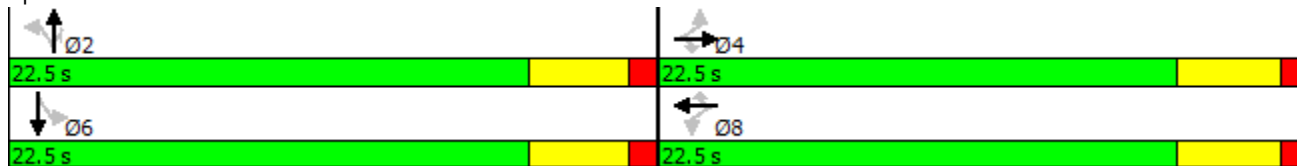
2026 Total PM
 Premier Gateway Phase 1B Employment Area

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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	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	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	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	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	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	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	17.5	17.5	17.5	17.5	17.5	17.5	18.0		18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.40		0.40	0.40	0.40	0.40
v/c Ratio	0.18	0.71	0.07	0.49	0.76	0.11	0.38		0.80	0.18	0.06	0.06
Control Delay	12.0	13.8	3.8	16.4	14.7	3.4	12.1		23.7	9.8	4.3	4.3
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	12.0	13.8	3.8	16.4	14.7	3.4	12.1		23.7	9.8	4.3	4.3
LOS	B	B	A	B	B	A	B		C	A	A	A
Approach Delay		13.5			14.4			20.4				8.2
Approach LOS		B			B			C				A

Intersection Summary

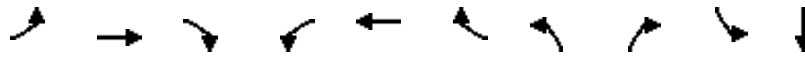
Area Type:	Other
Cycle Length:	45
Actuated Cycle Length:	44.5
Natural Cycle:	45
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.80
Intersection Signal Delay:	14.9
Intersection LOS:	B
Intersection Capacity Utilization:	77.1%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 17: "Street C"/"Street B" & Steeles Avenue



Queues
17: "Street C"/"Street B" & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT
Lane Group Flow (vph)	30	1425	45	160	1515	70	210	530	100	40
v/c Ratio	0.18	0.71	0.07	0.49	0.76	0.11	0.38	0.80	0.18	0.06
Control Delay	12.0	13.8	3.8	16.4	14.7	3.4	12.1	23.7	9.8	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.0	13.8	3.8	16.4	14.7	3.4	12.1	23.7	9.8	4.3
Queue Length 50th (m)	1.5	33.9	0.0	4.7	36.9	0.0	11.6	33.9	5.0	0.2
Queue Length 95th (m)	6.1	46.9	4.2	12.0	51.0	5.2	24.7	#81.9	12.3	4.2
Internal Link Dist (m)		293.8			358.9					207.4
Turn Bay Length (m)	30.0		30.0	60.0		30.0	30.0	100.0	30.0	
Base Capacity (vph)	173	2060	668	336	2060	683	551	662	571	662
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	0.17	0.69	0.07	0.48	0.74	0.10	0.38	0.80	0.18	0.06

Intersection Summary

























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

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

17: "Street C"/"Street B" & Steeles Avenue

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
Future Volume (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00		1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00		0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1770		1583	1770	1583	
Flt Permitted	0.23	1.00	1.00	0.23	1.00	1.00	0.73		1.00	0.76	1.00	
Satd. Flow (perm)	428	5085	1583	831	5085	1583	1362		1583	1410	1583	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	1425	45	160	1515	70	210	0	530	100	0	40
RTOR Reduction (vph)	0	0	27	0	0	43	0	0	21	0	21	0
Lane Group Flow (vph)	30	1425	18	160	1515	27	210	0	509	100	19	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm		Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	17.4	17.4	17.4	17.4	17.4	17.4	18.0		18.0	18.0	18.0	
Effective Green, g (s)	17.4	17.4	17.4	17.4	17.4	17.4	18.0		18.0	18.0	18.0	
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.41		0.41	0.41	0.41	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	167	1992	620	325	1992	620	552		641	571	641	
v/s Ratio Prot		0.28			c0.30							0.01
v/s Ratio Perm	0.07		0.01	0.19		0.02	0.15		c0.32	0.07		
v/c Ratio	0.18	0.72	0.03	0.49	0.76	0.04	0.38		0.79	0.18	0.03	
Uniform Delay, d1	8.8	11.4	8.3	10.2	11.7	8.4	9.3		11.6	8.4	7.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.5	1.2	0.0	1.2	1.8	0.0	2.0		9.8	0.7	0.1	
Delay (s)	9.3	12.7	8.3	11.3	13.5	8.4	11.3		21.3	9.1	8.0	
Level of Service	A	B	A	B	B	A	B		C	A	A	
Approach Delay (s)		12.5			13.1			18.5			8.8	
Approach LOS		B			B			B			A	
Intersection Summary												
HCM 2000 Control Delay			13.7									
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			44.4									
Intersection Capacity Utilization			77.1%									
Analysis Period (min)			15									
c Critical Lane Group												



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	245	0	0	90	95	65
Future Volume (vph)	245	0	0	90	95	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t						0.945
Fl _t Protected	0.950					
Satd. Flow (prot)	1770	0	0	1863	1760	0
Fl _t Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1760	0
Link Speed (k/h)	50			60	60	
Link Distance (m)	145.7			1049.4	174.4	
Travel Time (s)	10.5			63.0	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	245	0	0	90	95	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	245	0	0	90	160	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type:	Roundabout
Intersection Capacity Utilization	29.2% ICU Level of Service A
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 18: Hornby Road & "Street A"



















2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Right Turn Channelized						
Traffic Volume (veh/h)	245	0	0	90	95	65
Future Volume (veh/h)	245	0	0	90	95	65
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	245	0	0	90	95	65
Approach Volume (veh/h)	245			90	160	
Crossing Volume (veh/h)	95			245	0	
High Capacity (veh/h)	1286			1143	1385	
High v/c (veh/h)	0.19			0.08	0.12	
Low Capacity (veh/h)	1071			942	1161	
Low v/c (veh/h)	0.23			0.10	0.14	
Intersection Summary						
Maximum v/c High			0.19			
Maximum v/c Low			0.23			
Intersection Capacity Utilization			29.2%		ICU Level of Service	A

Lanes, Volumes, Timings
19: Trafalgar Road & "Street B"

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Future Volume (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
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	1.00	1.00	1.00	1.00	1.00
Frt		0.937			0.966			0.985			0.979	
Flt Protected		0.974			0.964		0.950			0.950		
Satd. Flow (prot)	0	1700	0	0	1735	0	1770	1835	0	1770	1824	0
Flt Permitted		0.974			0.964		0.950			0.950		
Satd. Flow (perm)	0	1700	0	0	1735	0	1770	1835	0	1770	1824	0
Link Speed (k/h)		50			50			80			80	
Link Distance (m)		207.1			712.3			126.5			32.6	
Travel Time (s)		14.9			51.3			5.7			1.5	
Peak Hour 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
Adj. Flow (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	215	0	0	455	0	70	1465	0	50	600	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
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 (k/h)	25		15	25		15	25		15	25		15
Sign Control		Stop			Stop			Free			Free	




















Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	117.5%
ICU Level of Service	H
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

19: Trafalgar Road & "Street B"

2026 Total PM
Premier Gateway Phase 1B Employment Area

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	0	100	340	0	115	70	1320	145	50	515	85
Future Volume (Veh/h)	115	0	100	340	0	115	70	1320	145	50	515	85
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour 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
Hourly flow rate (vph)	115	0	100	340	0	115	70	1320	145	50	515	85
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	2232	2262	558	2248	2232	1392	600			1465		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2232	2262	558	2248	2232	1392	600			1465		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	81	0	100	34	93			89		
cM capacity (veh/h)	9	34	530	21	35	174	977			461		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	215	455	70	1465	50	600						
Volume Left	115	340	70	0	50	0						
Volume Right	100	115	0	145	0	85						
cSH	16	27	977	1700	461	1700						
Volume to Capacity	13.08	16.94	0.07	0.86	0.11	0.35						
Queue Length 95th (m)	Err	Err	1.8	0.0	2.9	0.0						
Control Delay (s)	Err	Err	9.0	0.0	13.8	0.0						
Lane LOS	F	F	A		B							
Approach Delay (s)	Err	Err	0.4		1.1							
Approach LOS	F	F										
Intersection Summary												
Average Delay			2347.0									
Intersection Capacity Utilization			117.5%		ICU Level of Service				H			
Analysis Period (min)			15									

Lanes, Volumes, Timings
20: Eighth Line & "Street B"

2026 Total PM
Premier Gateway Phase 1B Employment Area



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	145	190	80	585	185	65
Future Volume (vph)	145	190	80	585	185	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923				0.965	
Flt Protected	0.979			0.994		
Satd. Flow (prot)	1683	0	0	1852	1798	0
Flt Permitted	0.979			0.994		
Satd. Flow (perm)	1683	0	0	1852	1798	0
Link Speed (k/h)	50			70	70	
Link Distance (m)	712.3			618.0	2468.4	
Travel Time (s)	51.3			31.8	126.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	145	190	80	585	185	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	335	0	0	665	250	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	78.6%
ICU Level of Service	D
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
 20: Eighth Line & "Street B"

2026 Total PM
 Premier Gateway Phase 1B Employment Area



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	190	80	585	185	65
Future Volume (Veh/h)	145	190	80	585	185	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	145	190	80	585	185	65
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	962	218	250			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	962	218	250			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	46	77	94			
cM capacity (veh/h)	266	822	1316			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	335	665	250			
Volume Left	145	80	0			
Volume Right	190	0	65			
cSH	432	1316	1700			
Volume to Capacity	0.78	0.06	0.15			
Queue Length 95th (m)	53.4	1.6	0.0			
Control Delay (s)	36.7	1.6	0.0			
Lane LOS	E	A				
Approach Delay (s)	36.7	1.6	0.0			
Approach LOS	E					
Intersection Summary						
Average Delay			10.7			
Intersection Capacity Utilization			78.6%	ICU Level of Service	D	
Analysis Period (min)			15			