

July 9, 2025

Attention:

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**Reference: Brown Lands
Traffic Impact Study Addendum/Response to December 2024 Comments
Our File No.: 118178**

A revised Transportation Impact Study (TIS) was prepared by Novatech in February 2024. Parsons was retained by the Municipality of Mississippi Mills as 3rd party reviewer of the report. This letter is intended to be read as part of a comment response to the Parsons review comments dated March 2025 as well as an addendum to the Novatech February 2024 revised TIS.

Response to Parsons Technical Review Comments

Relevant sections of the TIS review completed by Parsons have been attached to this letter in **Attachment A**.

As noted in Table A-1 of Parsons review, the original TIS was prepared prior to the approval of the 2024 Mississippi Mills TMP and is based on data from the previous 2016 TMP. Strathburn Street and Malcolm Street are both no longer classified as collector roads and are now considered local roads as part of the TMP update.

Since the application is to rely on the policies that were in force on the date that the application was filed, the TIS has not been updated to reflect the new 2024 MMTMP. To address the remaining Parsons comments in Table A-1, a review of movements exceeding a 0.85 v/c ratio has been completed and a saturated flow rate of 1,900 veh/hr/lane and PHF of 0.92 has been used throughout the analysis. Additionally the signal timing plan at the Christian Street (CR29)/Almonte Street intersection has been updated to match the timing plan shown in the Parsons technical review shown in **Attachment A**. The updated analysis is summarized below.

Existing Traffic Conditions

The below existing conditions analysis of the study area intersections has been updated as per the Parsons technical review. Detailed synchro reports are included in **Attachment B**.

Table 1: Analysis Results - Existing Traffic Conditions

Intersection	AM Peak			PM Peak		
	V/C or Delay	LOS	Mvmt	V/C or Delay	LOS	Mvmt
CR29/Strathburn St/Gleeson St	12 sec	B	WB	12 sec	B	WB
Christian St (CR29)/Almonte St	0.73	C	WB	1.06	F	WB
Christian St (CR29)/Almonte St ¹	0.65	B	WB	0.85	D	WB
Strathburn St/Malcolm St	9 sec	A	NB	9 sec	A	NB
Almonte St/Malcolm St	13 sec	B	SB	17 sec	C	SB

1. Optimized timing plan

After altering the Synchro parameters, the existing operations of the Christian Street (CR29)/Almonte Street intersection operate with the westbound leg operating with a LOS F. As noted in the Parsons review, the current split of green time is not optimal based on the existing traffic volumes. After optimizing the signal timing plan to a 75 second cycle length the v/c ratios for all movements improve to an acceptable v/c of at least 0.85.

The 75 second cycle length with an optimized green time split has been carried forward in future traffic scenarios.

Background Traffic

Updated background traffic analysis is summarized in **Table 2**. Detailed synchro reports are included in **Attachment B**.

Table 2: Analysis Results - Background Traffic Conditions

Intersection	AM Peak			PM Peak		
	Delay or V/C	LOS	Mvmt	Delay or V/C	LOS	Mvmt
<i>2029 Background Traffic</i>						
CR29/Strathburn St/Gleeson St	12 sec.	B	WB	12 sec.	B	WB
Christian St (CR29)/Almonte St	0.68	B	WB	0.88	D	WB
Strathburn St/Malcolm St	9 sec	A	NB	9 sec	A	NB
Almonte St/Malcolm St	14 sec	B	SB	18 sec	C	SB
<i>2034 Background Traffic</i>						
CR29/Strathburn St/Gleeson St	12 sec.	B	WB	13 sec.	B	WB
Christian St (CR29)/Almonte St	0.72	C	WB	0.89	D	WB
Strathburn St/Malcolm St	9 sec	A	NB	9 sec	A	NB
Almonte St/Malcolm St	14 sec	B	SB	18 sec	C	SB

Based on background traffic analysis, all intersections are anticipated to operate with a LOS D or better. However, the v/c ratio for the westbound movement at Christian Street (CR29)/Almonte Street intersection slightly exceed the MTO threshold of 0.85. To improve the v/c ratio, consideration could

be given by the Municipality or County to providing an auxiliary left or right turn lane on the westbound approach to this intersection.

Total Traffic

Updated total traffic analysis is summarized in **Table 3**. Detailed synchro reports are included in **Attachment B**.

Table 3: Analysis Results - Total Traffic Conditions

Intersection	AM Peak			PM Peak		
	Delay or V/C	LOS	Mvmt	Delay or V/C	LOS	Mvmt
<i>2029 Total Traffic</i>						
CR29/Strathburn St/Gleeson St	13 sec.	B	WB	17 sec.	C	WB
Christian St (CR29)/Almonte St	0.70	B	WB	0.90	D	WB
Strathburn St/Malcolm St	9 sec	A	NB	9 sec	A	NB
Almonte St/Malcolm St	15 sec	B	SB	20 sec	C	SB
County Road 29/Street 1	12 sec.	B	WB	15 sec.	B	WB
Strathburn Street/Street 2	9 sec.	A	SB	9 sec.	A	SB
<i>2034 Total Traffic</i>						
CR29/Strathburn St/Gleeson St	14 sec.	B	WB	18 sec.	C	WB
Christian St (CR29)/Almonte St	0.73	B	WB	0.91	E	WB
Strathburn St/Malcolm St	9 sec	A	NB	9 sec	A	NB
Almonte St/Malcolm St	15 sec	B	SB	21 sec	C	SB
County Road 29/Street 1	12 sec.	B	WB	15 sec.	C	WB
Strathburn Street/Street 2	9 sec.	A	SB	9 sec.	A	SB

Based on total traffic analysis, all intersections are anticipated to operate with a LOS D or better except the Christian Street (CR29)/Almonte Street intersection.

Based on the analysis, site traffic marginally increases the v/c ratio of the westbound movement at the Christian Street (CR29)/Almonte Street intersection by 0.02 during the 2034 horizon year. As the critical movements are attributable to background traffic demand, consideration could be given by the Municipality or County to providing an auxiliary left or right turn lane on the westbound approach to improve operations at this intersection.

Sensitivity Analysis

Updated sensitivity traffic analysis is summarized in **Table 4**. Detailed synchro reports are included in **Attachment B**.

Table 4: Intersection Operations – Sensitivity Analysis

Intersection	AM Peak			PM Peak		
	V/C or Delay	LOS	Mvmt	V/C or Delay	LOS	Mvmt
Almonte St/ Malcolm St	16 sec	C	SB	24 sec	C	SB

Based on the above, 50% of site traffic arriving and departing to the east via the Almonte Street/Malcolm Street intersection is anticipated to increase southbound delays from 14 seconds to 16 seconds during the AM peak hour and from 18 seconds to 24 seconds during the PM peak hour, compared to the 2034 background traffic condition. The increased delays result in an acceptable LOS C.

Conclusions

Based on the above, the analysis using the updated Synchro parameters recommended by Parsons is generally consistent with the findings presented in the revised TIS.

Yours truly,

NOVATECH

Prepared by:



Trevor Van Wiechen, P.Eng.
Project Engineer | Transportation

Reviewed by:

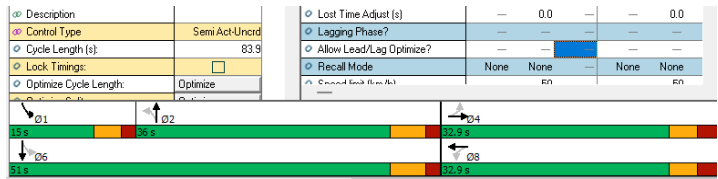
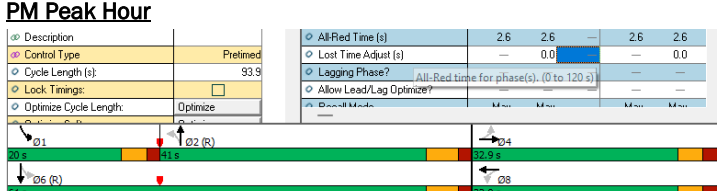


Brad Byvelds, P.Eng.
Senior Project Manager | Transportation

Attachment A

Parsons Technical Review Excerpts

Table A-1: Comments Addressing the TIS Content

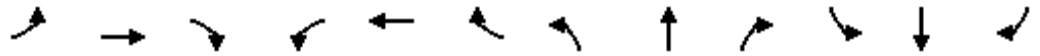
Section	Comment	Parsons Input
Throughout	<p>Since the TIS report was prepared prior to the approval of the new 2024 Mississippi Mills TMP, it may be worth noting that some information in the TIS based on the 2016 MMTMP is now superseded by the 2024 TMP. This includes the roadway descriptions in Section 2.0, where Strathburn Street and Malcolm Street are both no longer classified as collector roads and are now considered local roads as per Schedule 15 in the new TMP. It also includes the planned conditions of Section 3.0 Table 2, where the new TMP's Table 38 provides a different set of future road projects. Lastly, the AADT and vehicles per hour based on road classification (indicated in Section 6.4 of the TIS) were modified slightly in the new TMP and a local road is considered optimal for a traffic volume up to 120 vehicles per hour.</p>	<p>If desired by the Municipality staff, information obtained from the previous TMP in the TIS report can be updated to utilize the new 2024 Mississippi Mills TMP.</p>
Section 1.3, Page 2 and Section 6.0, Page 12	<p>The HCM delay criteria for signalized intersections is provided (referred to as Exhibit 18-4 in the TIS). Also, MTO Guidelines is referenced for v/c ratio criteria at signals. However, analysis results in Section 6.0 only reference the v/c ratios at the County Road 2/Almonte intersection and do not acknowledge the v/c ratios exceeding 0.85 during the PM peak hour for the WB movement in all scenarios.</p>	<p>As the MTO Guidelines consider v/c ratios exceeding 0.85 to be less optimal, it may be noting delays for other movements at the signalized intersection and acknowledging v/c ratios exceeding 0.85.</p>
Section 6.0, Page 12	<p>Based on the Synchro reports in Appendix D, the analysis uses a Peak Hour Factor (PHF) of 0.9 for existing conditions and 1.0 for future conditions, as well as a saturated flow rate of 1,800 veh/hr/lane. These parameters are typically utilized by the City of Ottawa based on the requirements of the City's TIA Guidelines. However, they may not necessarily apply to the context of Almonte.</p>	<p>Consider using the default HCM saturated flow rate of 1,900 veh/hr/lane, as well as a more conservative PHF for future conditions. Also consider using the default Synchro PHF value of 0.92, or a value of 0.9 for future conditions to match the parameters of the existing conditions analysis. Spot checks using Synchro were carried out to recreate the Novatech analysis using the parameters mentioned. Based on the analysis, these changes are not expected to result in any major changes to conclusions of the TIS.</p>
Appendix C and D	<p>Based on the Synchro reports, a cycle length of 75 seconds was used at the County Road 29/Almonte signalized intersection for both AM and PM in all scenarios. While this cycle length is acceptable as the most optimal time for traffic operations in all future scenarios, it may not be accurately representing the cycle lengths and phase splits in existing conditions based on the signal timing plan in Appendix C of the TIS, as it does not take into account the "green time only" table. The assumed existing timing plan splits for AM and PM have been recreated below based on the available signal timing plan.</p> <p>AM Peak Hour</p>  <p>PM Peak Hour</p> 	<p>Note that this timing plan was tested and found to result in higher congestion and delay results for existing conditions, particularly for the AM peak hour. Optimizing the cycle length in future conditions to 75 seconds is found to be acceptable, but it may be worth noting that the current split is not optimal for existing conditions.</p>

Attachment B

Detailed Synchro Reports

12: County Road 29 & Almonte Street
 11 Existing 2023 AM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	24	164	16	85	64	39	9	90	57	112	110	22
Future Volume (vph)	24	164	16	85	64	39	9	90	57	112	110	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.990			0.972			0.951			0.975	
Flt Protected		0.994			0.978			0.997		0.950		
Satd. Flow (prot)	0	1745	0	0	1710	0	0	1686	0	1722	1740	0
Flt Permitted		0.948			0.679			0.985		0.611		
Satd. Flow (perm)	0	1664	0	0	1187	0	0	1666	0	1107	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			16			38			19	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			8.7			11.3	
Confl. Peds. (#/hr)	1						1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	26	178	17	92	70	42	10	98	62	122	120	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	221	0	0	204	0	0	170	0	122	144	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
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	

12: County Road 29 & Almonte Street
 11 Existing 2023 AM Peak

07/08/2025

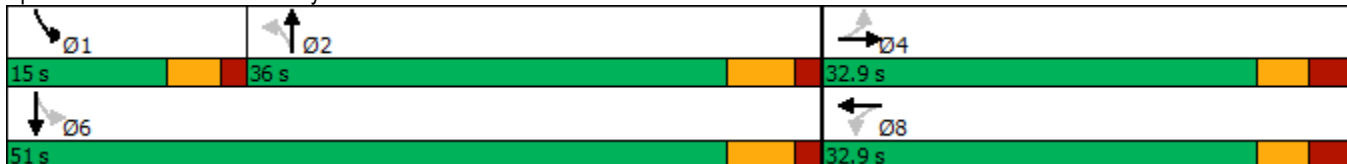


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	32.9	32.9		32.9	32.9		36.0	36.0		15.0	51.0	
Total Split (%)	39.2%	39.2%		39.2%	39.2%		42.9%	42.9%		17.9%	60.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		30.0	30.0		10.0	45.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		16.5			16.5			35.0		46.3	45.3	
Actuated g/C Ratio		0.22			0.22			0.47		0.63	0.61	
v/c Ratio		0.59			0.73			0.21		0.16	0.13	
Control Delay		31.2			40.1			12.5		7.5	6.8	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		31.2			40.1			12.5		7.5	6.8	
LOS		C			D			B		A	A	
Approach Delay		31.2			40.1			12.5			7.1	
Approach LOS		C			D			B			A	

Intersection Summary


















Area Type:	Other
Cycle Length:	83.9
Actuated Cycle Length:	73.8
Natural Cycle:	75
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	22.2
Intersection LOS:	C
Intersection Capacity Utilization:	66.6%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 12: County Road 29 & Almonte Street



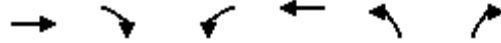
3: County Road 29 & Gleeson Road/Strathburn Street
 11 Existing 2023 AM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	2	1	0	2	157	1	1	200	0
Future Volume (Veh/h)	0	0	5	2	1	0	2	157	1	1	200	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	5	2	1	0	2	171	1	1	217	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	394	395	217	399	394	171	217			172		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	394	395	217	399	394	171	217			172		
tC, single (s)	7.1	6.5	6.2	7.2	6.7	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.2	3.3	2.3			2.3		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	563	541	823	546	514	873	1324			1335		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	5	3	173	1	218							
Volume Left	0	2	2	0	1							
Volume Right	5	0	0	1	0							
cSH	823	535	1324	1700	1335							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.1	0.0	0.0	0.0							
Control Delay (s)	9.4	11.8	0.1	0.0	0.0							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.4	11.8	0.1		0.0							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			27.2%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 11 Existing 2023 AM Peak

















07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	3	1	1	7	1
Future Volume (Veh/h)	0	3	1	1	7	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	1	8	1
Pedestrians	1			1	4	
Lane Width (m)	3.7			3.7	3.7	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			7		10	6
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		10	6
tC, single (s)			4.1		6.5	6.3
tC, 2 stage (s)						
tF (s)			2.2		3.6	3.4
p0 queue free %			100		99	100
cM capacity (veh/h)			1608		995	1045
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	3	2	9			
Volume Left	0	1	8			
Volume Right	3	0	1			
cSH	1700	1608	1001			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (m)	0.0	0.0	0.2			
Control Delay (s)	0.0	3.6	8.6			
Lane LOS			A			
Approach Delay (s)	0.0	3.6	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.1			
Intersection Capacity Utilization			14.9%	ICU Level of Service	A	
Analysis Period (min)			15			

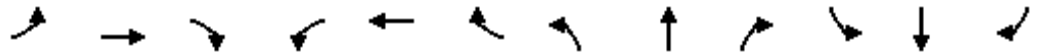
16: Malcolm Street & Almonte Street
 11 Existing 2023 AM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	276	0	0	206	16	0	0	0	22	0	1
Future Volume (Veh/h)	2	276	0	0	206	16	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	300	0	0	224	17	0	0	0	24	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	242			302			542	548	303	538	540	236
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	242			302			542	548	303	538	540	236
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	95	100	100
cM capacity (veh/h)	1240			1257			448	442	735	451	447	735
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	302	241	0	25								
Volume Left	2	0	0	24								
Volume Right	0	17	0	1								
cSH	1240	1257	1700	458								
Volume to Capacity	0.00	0.00	0.00	0.05								
Queue Length 95th (m)	0.0	0.0	0.0	1.3								
Control Delay (s)	0.1	0.0	0.0	13.3								
Lane LOS	A		A	B								
Approach Delay (s)	0.1	0.0	0.0	13.3								
Approach LOS			A	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			26.8%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 12 Existing 2023 PM Peak

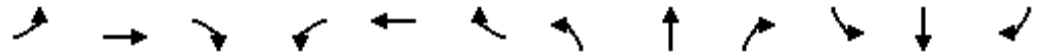
07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	28	213	47	77	209	87	36	154	66	75	127	36
Future Volume (vph)	28	213	47	77	209	87	36	154	66	75	127	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99						1.00	
Frt		0.978			0.968			0.965			0.967	
Flt Protected		0.995			0.990			0.993		0.950		
Satd. Flow (prot)	0	1718	0	0	1719	0	0	1701	0	1722	1714	0
Flt Permitted		0.910			0.745			0.939		0.519		
Satd. Flow (perm)	0	1571	0	0	1294	0	0	1609	0	941	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			16			21			26	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1					
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	30	232	51	84	227	95	39	167	72	82	138	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	313	0	0	406	0	0	278	0	82	177	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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												

12: County Road 29 & Almonte Street
 12 Existing 2023 PM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	32.9	32.9		32.9	32.9		41.0	41.0		20.0	61.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		43.7%	43.7%		21.3%	65.0%	
Maximum Green (s)	27.0	27.0		27.0	27.0		35.0	35.0		15.0	55.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		27.0			27.0			44.7		56.0	55.0	
Actuated g/C Ratio		0.29			0.29			0.48		0.60	0.59	
v/c Ratio		0.68			1.06			0.36		0.13	0.17	
Control Delay		37.5			96.0			17.0		8.6	8.1	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		37.5			96.0			17.0		8.6	8.1	
LOS		D			F			B		A	A	
Approach Delay		37.5			96.0			17.0			8.3	
Approach LOS		D			F			B			A	

Intersection Summary

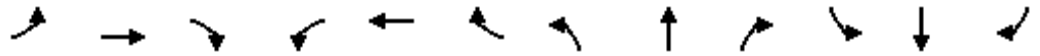
Area Type:	Other
Cycle Length:	93.9
Actuated Cycle Length:	93.9
Natural Cycle:	75
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	1.06
Intersection Signal Delay:	45.8
Intersection LOS:	D
Intersection Capacity Utilization	78.0%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 12 Existing 2023 PM Peak

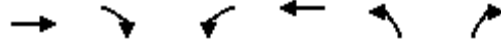
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	4	2	1	4	5	314	3	4	241	4
Future Volume (Veh/h)	0	0	4	2	1	4	5	314	3	4	241	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	4	2	1	4	5	341	3	4	262	4
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	628	626	264	627	625	341	266			344		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	628	626	264	627	625	341	266			344		
tC, single (s)	7.1	6.5	6.2	7.2	6.7	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.2	3.3	2.3			2.3		
p0 queue free %	100	100	99	99	100	99	100			100		
cM capacity (veh/h)	390	398	775	383	376	701	1269			1151		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	4	7	346	3	270							
Volume Left	0	2	5	0	4							
Volume Right	4	4	0	3	4							
cSH	775	515	1269	1700	1151							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.3	0.1	0.0	0.1							
Control Delay (s)	9.7	12.1	0.2	0.0	0.2							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.7	12.1	0.2		0.2							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			29.8%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 12 Existing 2023 PM Peak

















07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	6	2	0	13	2
Future Volume (Veh/h)	0	6	2	0	13	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	0	14	2
Pedestrians	3					
Lane Width (m)	3.7					
Walking Speed (m/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			7		10	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		10	4
tC, single (s)			4.1		6.5	6.3
tC, 2 stage (s)						
tF (s)			2.2		3.6	3.4
p0 queue free %			100		99	100
cM capacity (veh/h)			1614		997	1054
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	7	2	16			
Volume Left	0	2	14			
Volume Right	7	0	2			
cSH	1700	1614	1004			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (m)	0.0	0.0	0.4			
Control Delay (s)	0.0	7.2	8.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	7.2	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.1			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

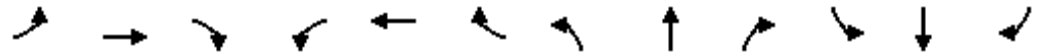
16: Malcolm Street & Almonte Street
 12 Existing 2023 PM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	273	0	1	442	35	0	1	1	20	0	7
Future Volume (Veh/h)	1	273	0	1	442	35	0	1	1	20	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	297	0	1	480	38	0	1	1	22	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	518			303			818	825	303	802	806	503
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	518			303			818	825	303	802	806	503
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	93	100	98
cM capacity (veh/h)	976			1256			289	307	735	300	314	514
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	298	519	2	30								
Volume Left	1	1	0	22								
Volume Right	0	38	1	8								
cSH	976	1256	433	338								
Volume to Capacity	0.00	0.00	0.00	0.09								
Queue Length 95th (m)	0.0	0.0	0.1	2.2								
Control Delay (s)	0.0	0.0	13.4	16.7								
Lane LOS	A	A	B	C								
Approach Delay (s)	0.0	0.0	13.4	16.7								
Approach LOS			B	C								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			41.7%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 13 Existing 2023 AM Peak OPT

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Volume (vph)	24	164	16	85	64	39	9	90	57	112	110	22
Future Volume (vph)	24	164	16	85	64	39	9	90	57	112	110	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Frt		0.990			0.972			0.951			0.975	
Flt Protected		0.994			0.978			0.997		0.950		
Satd. Flow (prot)	0	1745	0	0	1710	0	0	1686	0	1722	1740	0
Flt Permitted		0.947			0.721			0.984		0.611		
Satd. Flow (perm)	0	1662	0	0	1260	0	0	1664	0	1107	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			19			42			18	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			8.7			11.3	
Confl. Peds. (#/hr)	1						1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	26	178	17	92	70	42	10	98	62	122	120	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	221	0	0	204	0	0	170	0	122	144	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
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	

12: County Road 29 & Almonte Street
 13 Existing 2023 AM Peak OPT

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	33.0	33.0		33.0	33.0		32.0	32.0		10.0	42.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		42.7%	42.7%		13.3%	56.0%	
Maximum Green (s)	27.1	27.1		27.1	27.1		26.0	26.0		5.0	36.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		15.1			15.1			28.4		37.3	36.3	
Actuated g/C Ratio		0.24			0.24			0.45		0.59	0.57	
v/c Ratio		0.55			0.65			0.22		0.17	0.14	
Control Delay		25.5			29.3			11.5		8.1	7.4	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		25.5			29.3			11.5		8.1	7.4	
LOS		C			C			B		A	A	
Approach Delay		25.5			29.3			11.5			7.7	
Approach LOS		C			C			B			A	

Intersection Summary

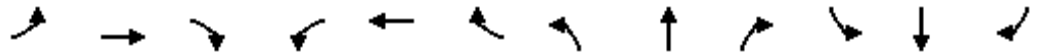
Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 63.4
 Natural Cycle: 75
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 18.1
 Intersection LOS: B
 Intersection Capacity Utilization 66.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



12: County Road 29 & Almonte Street
 14 Existing 2023 PM Peak OPT

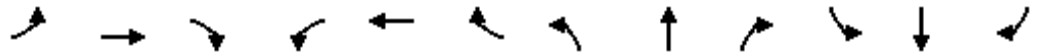
07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	28	213	47	77	209	87	36	154	66	75	127	36
Future Volume (vph)	28	213	47	77	209	87	36	154	66	75	127	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						1.00	
Frt		0.978			0.968			0.965			0.967	
Flt Protected		0.995			0.990			0.993		0.950		
Satd. Flow (prot)	0	1718	0	0	1719	0	0	1701	0	1722	1714	0
Flt Permitted		0.937			0.822			0.937		0.489		
Satd. Flow (perm)	0	1618	0	0	1427	0	0	1605	0	886	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			24			24			24	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1					
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	30	232	51	84	227	95	39	167	72	82	138	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	313	0	0	406	0	0	278	0	82	177	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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												

12: County Road 29 & Almonte Street
 14 Existing 2023 PM Peak OPT

07/08/2025

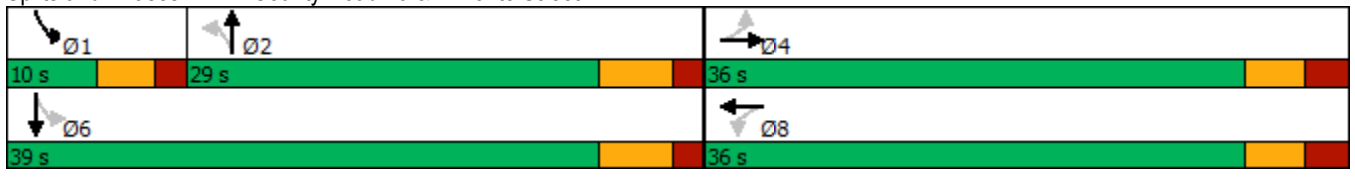


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		10.0	39.0	
Total Split (%)	48.0%	48.0%		48.0%	48.0%		38.7%	38.7%		13.3%	52.0%	
Maximum Green (s)	30.1	30.1		30.1	30.1		23.0	23.0		5.0	33.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		21.5			21.5			25.5		34.3	33.3	
Actuated g/C Ratio		0.32			0.32			0.38		0.51	0.50	
v/c Ratio		0.59			0.85			0.44		0.16	0.20	
Control Delay		22.3			37.2			19.7		11.1	10.3	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		22.3			37.2			19.7		11.1	10.3	
LOS		C			D			B		B	B	
Approach Delay		22.3			37.2			19.7			10.6	
Approach LOS		C			D			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	75
Actuated Cycle Length:	66.8
Natural Cycle:	75
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	24.1
Intersection LOS:	C
Intersection Capacity Utilization:	78.0%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 12: County Road 29 & Almonte Street



12: County Road 29 & Almonte Street
 21 Background 2029 AM Peak

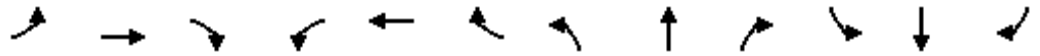
07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	25	174	17	90	68	41	10	95	60	119	117	23
Future Volume (vph)	25	174	17	90	68	41	10	95	60	119	117	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00					1.00	1.00	
Frt		0.990			0.972			0.951			0.975	
Flt Protected		0.994			0.978			0.997		0.950		
Satd. Flow (prot)	0	1745	0	0	1710	0	0	1686	0	1722	1734	0
Flt Permitted		0.948			0.705			0.983		0.601		
Satd. Flow (perm)	0	1664	0	0	1232	0	0	1662	0	1088	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			20			42			18	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	27	189	18	98	74	45	11	103	65	129	127	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	234	0	0	217	0	0	179	0	129	152	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 21 Background 2029 AM Peak

07/08/2025

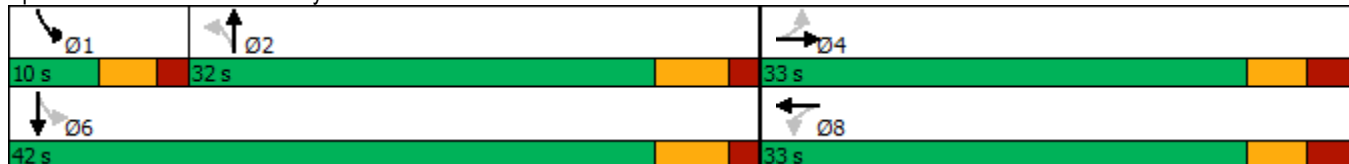


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		30.0	30.0		10.0	30.0	
Total Split (s)	33.0	33.0		33.0	33.0		32.0	32.0		10.0	42.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		42.7%	42.7%		13.3%	56.0%	
Maximum Green (s)	27.1	27.1		27.1	27.1		26.0	26.0		5.0	36.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		15.7			15.7			28.4		37.3	36.3	
Actuated g/C Ratio		0.25			0.25			0.44		0.58	0.57	
v/c Ratio		0.57			0.68			0.24		0.19	0.15	
Control Delay		25.8			31.0			11.9		8.3	7.7	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		25.8			31.0			11.9		8.3	7.7	
LOS		C			C			B		A	A	
Approach Delay		25.8			31.0			11.9			8.0	
Approach LOS		C			C			B			A	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 64
 Natural Cycle: 75
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 18.8
 Intersection LOS: B
 Intersection Capacity Utilization 74.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 21 Background 2029 AM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Volume (veh/h)	0	0	5	2	1	0	2	166	1	1	212	0
Future Volume (Veh/h)	0	0	5	2	1	0	2	166	1	1	212	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	5	2	1	0	2	180	1	1	230	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	416	417	230	421	416	180	230			181		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	416	417	230	421	416	180	230			181		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	534	516	795	537	525	860	1315			1371		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	5	3	182	1	231							
Volume Left	0	2	2	0	1							
Volume Right	5	0	0	1	0							
cSH	795	533	1315	1700	1371							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.1	0.0	0.0	0.0							
Control Delay (s)	9.6	11.8	0.1	0.0	0.0							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.6	11.8	0.1		0.0							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			27.9%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 21 Background 2029 AM Peak

07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	3	1	1	7	1
Future Volume (Veh/h)	0	3	1	1	7	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	1	8	1
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			3		4	2
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3		4	2
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1619		1017	1083
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	3	2	9			
Volume Left	0	1	8			
Volume Right	3	0	1			
cSH	1700	1619	1024			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (m)	0.0	0.0	0.2			
Control Delay (s)	0.0	3.6	8.5			
Lane LOS			A			
Approach Delay (s)	0.0	3.6	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			6.0			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street
 21 Background 2029 AM Peak

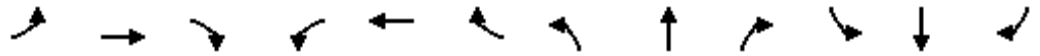
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	2	293	0	0	218	16	0	0	0	22	0	1
Future Volume (Veh/h)	2	293	0	0	218	16	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	318	0	0	237	17	0	0	0	24	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	255			320			572	579	321	570	570	248
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	255			320			572	579	321	570	570	248
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	94	100	100
cM capacity (veh/h)	1226			1238			427	424	718	430	429	722
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	320	254	0	25								
Volume Left	2	0	0	24								
Volume Right	0	17	0	1								
cSH	1226	1238	1700	437								
Volume to Capacity	0.00	0.00	0.00	0.06								
Queue Length 95th (m)	0.0	0.0	0.0	1.4								
Control Delay (s)	0.1	0.0	0.0	13.7								
Lane LOS	A		A	B								
Approach Delay (s)	0.1	0.0	0.0	13.7								
Approach LOS			A	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			27.7%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 22 Background 2029 PM Peak

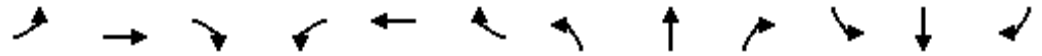
07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↗	↘	
Traffic Volume (vph)	30	226	50	82	222	92	38	163	70	80	135	38
Future Volume (vph)	30	226	50	82	222	92	38	163	70	80	135	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00					1.00	1.00	
Frt		0.978			0.969			0.965			0.967	
Flt Protected		0.995			0.990			0.993		0.950		
Satd. Flow (prot)	0	1718	0	0	1721	0	0	1701	0	1722	1714	0
Flt Permitted		0.930			0.811			0.935		0.470		
Satd. Flow (perm)	0	1605	0	0	1410	0	0	1602	0	851	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			24			24			24	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	33	246	54	89	241	100	41	177	76	87	147	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	333	0	0	430	0	0	294	0	87	188	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 22 Background 2029 PM Peak

07/08/2025

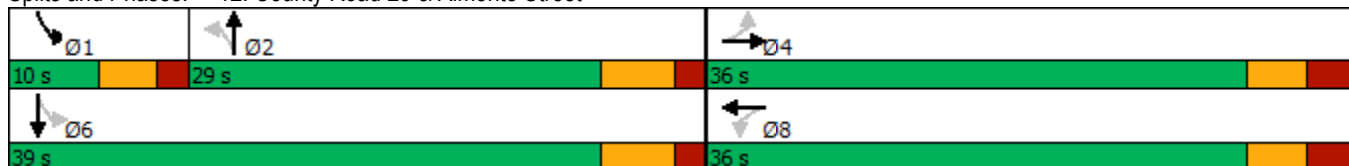


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		10.0	39.0	
Total Split (%)	48.0%	48.0%		48.0%	48.0%		38.7%	38.7%		13.3%	52.0%	
Maximum Green (s)	30.1	30.1		30.1	30.1		23.0	23.0		5.0	33.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		23.0			23.0			25.5		34.3	33.3	
Actuated g/C Ratio		0.34			0.34			0.37		0.50	0.49	
v/c Ratio		0.61			0.88			0.48		0.18	0.22	
Control Delay		22.5			40.0			20.9		11.7	11.0	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		22.5			40.0			20.9		11.7	11.0	
LOS		C			D			C		B	B	
Approach Delay		22.5			40.0			20.9			11.2	
Approach LOS		C			D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 68.2
 Natural Cycle: 75
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 25.5
 Intersection LOS: C
 Intersection Capacity Utilization 87.7%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 22 Background 2029 PM Peak

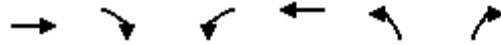
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	4	2	1	4	5	333	3	4	255	4
Future Volume (Veh/h)	0	0	4	2	1	4	5	333	3	4	255	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	4	2	1	4	5	362	3	4	277	4
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	664	662	279	663	661	362	281			365		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	664	662	279	663	661	362	281			365		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	99	100	99	100			100		
cM capacity (veh/h)	361	372	746	369	379	680	1259			1172		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	4	7	367	3	285							
Volume Left	0	2	5	0	4							
Volume Right	4	4	0	3	4							
cSH	746	502	1259	1700	1172							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.3	0.1	0.0	0.1							
Control Delay (s)	9.9	12.3	0.1	0.0	0.1							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.9	12.3	0.1		0.1							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			30.6%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 22 Background 2029 PM Peak

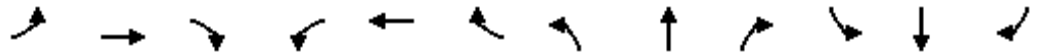
07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	6	2	0	13	2
Future Volume (Veh/h)	0	6	2	0	13	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	0	14	2
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			7		8	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		8	4
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1614		1012	1080
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	7	2	16			
Volume Left	0	2	14			
Volume Right	7	0	2			
cSH	1700	1614	1020			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (m)	0.0	0.0	0.4			
Control Delay (s)	0.0	7.2	8.6			
Lane LOS			A			
Approach Delay (s)	0.0	7.2	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.1			
Intersection Capacity Utilization			13.3%	ICU Level of Service		A
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street
 22 Background 2029 PM Peak

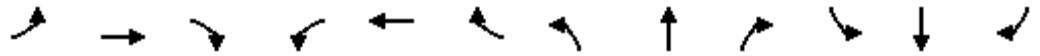
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	289	0	1	469	35	0	1	1	20	0	7
Future Volume (Veh/h)	1	289	0	1	469	35	0	1	1	20	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	314	0	1	510	38	0	1	1	22	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	548			320			865	872	320	848	853	533
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	548			320			865	872	320	848	853	533
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	92	100	98
cM capacity (veh/h)	950			1238			268	288	719	279	295	494
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	315	549	2	30								
Volume Left	1	1	0	22								
Volume Right	0	38	1	8								
cSH	950	1238	411	316								
Volume to Capacity	0.00	0.00	0.00	0.10								
Queue Length 95th (m)	0.0	0.0	0.1	2.4								
Control Delay (s)	0.0	0.0	13.8	17.6								
Lane LOS	A	A	B	C								
Approach Delay (s)	0.0	0.0	13.8	17.6								
Approach LOS			B	C								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			43.1%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 23 Background 2034 AM Peak

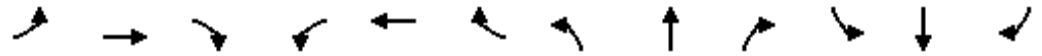
07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	27	182	18	94	71	43	10	100	63	124	122	24
Future Volume (vph)	27	182	18	94	71	43	10	100	63	124	122	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00					1.00	1.00	
Frt		0.989			0.972			0.951			0.975	
Flt Protected		0.994			0.978			0.997		0.950		
Satd. Flow (prot)	0	1742	0	0	1710	0	0	1686	0	1722	1734	0
Flt Permitted		0.945			0.689			0.983		0.590		
Satd. Flow (perm)	0	1656	0	0	1204	0	0	1663	0	1068	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			20			42			18	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	29	198	20	102	77	47	11	109	68	135	133	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	247	0	0	226	0	0	188	0	135	159	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 23 Background 2034 AM Peak

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		30.0	30.0		10.0	30.0	
Total Split (s)	33.0	33.0		33.0	33.0		32.0	32.0		10.0	42.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		42.7%	42.7%		13.3%	56.0%	
Maximum Green (s)	27.1	27.1		27.1	27.1		26.0	26.0		5.0	36.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		16.1			16.1			28.4		37.3	36.3	
Actuated g/C Ratio		0.25			0.25			0.44		0.58	0.56	
v/c Ratio		0.59			0.72			0.25		0.20	0.16	
Control Delay		26.1			32.8			12.3		8.6	7.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		26.1			32.8			12.3		8.6	7.9	
LOS		C			C			B		A	A	
Approach Delay		26.1			32.8			12.3			8.2	
Approach LOS		C			C			B			A	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 64.4
 Natural Cycle: 75
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 19.5
 Intersection LOS: B
 Intersection Capacity Utilization 75.6%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 23 Background 2034 AM Peak

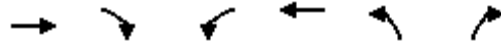
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	5	2	1	0	2	174	1	1	222	0
Future Volume (Veh/h)	0	0	5	2	1	0	2	174	1	1	222	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	5	2	1	0	2	189	1	1	241	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	436	437	241	441	436	189	241			190		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	436	437	241	441	436	189	241			190		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	518	503	783	521	511	850	1302			1360		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	5	3	191	1	242							
Volume Left	0	2	2	0	1							
Volume Right	5	0	0	1	0							
cSH	783	517	1302	1700	1360							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.1	0.0	0.0	0.0							
Control Delay (s)	9.6	12.0	0.1	0.0	0.0							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.6	12.0	0.1		0.0							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			28.4%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 23 Background 2034 AM Peak

07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	3	1	1	7	1
Future Volume (Veh/h)	0	3	1	1	7	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	1	8	1
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			3		4	2
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3		4	2
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1619		1017	1083
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	3	2	9			
Volume Left	0	1	8			
Volume Right	3	0	1			
cSH	1700	1619	1024			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (m)	0.0	0.0	0.2			
Control Delay (s)	0.0	3.6	8.5			
Lane LOS		A	A			
Approach Delay (s)	0.0	3.6	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			6.0			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street
 23 Background 2034 AM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	2	306	0	0	229	16	0	0	0	22	0	1
Future Volume (Veh/h)	2	306	0	0	229	16	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	333	0	0	249	17	0	0	0	24	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	267			335			600	606	336	596	598	260
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	267			335			600	606	336	596	598	260
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	94	100	100
cM capacity (veh/h)	1214			1222			410	410	704	413	414	711
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	335	266	0	25								
Volume Left	2	0	0	24								
Volume Right	0	17	0	1								
cSH	1214	1222	1700	420								
Volume to Capacity	0.00	0.00	0.00	0.06								
Queue Length 95th (m)	0.0	0.0	0.0	1.4								
Control Delay (s)	0.1	0.0	0.0	14.1								
Lane LOS	A		A	B								
Approach Delay (s)	0.1	0.0	0.0	14.1								
Approach LOS			A	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			28.3%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 24 Background 2034 PM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	31	236	52	85	232	97	40	171	73	83	141	40
Future Volume (vph)	31	236	52	85	232	97	40	171	73	83	141	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00					1.00	1.00	
Frt		0.978			0.968			0.965			0.967	
Flt Protected		0.995			0.990			0.993		0.950		
Satd. Flow (prot)	0	1718	0	0	1719	0	0	1701	0	1722	1714	0
Flt Permitted		0.929			0.808			0.932		0.454		
Satd. Flow (perm)	0	1604	0	0	1403	0	0	1597	0	822	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			24			24			24	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	34	257	57	92	252	105	43	186	79	90	153	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	348	0	0	449	0	0	308	0	90	196	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 24 Background 2034 PM Peak

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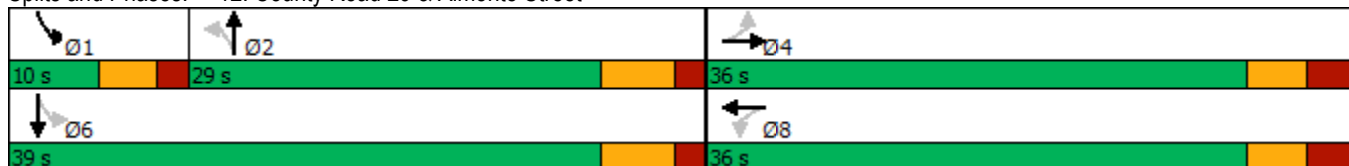


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		10.0	39.0	
Total Split (%)	48.0%	48.0%		48.0%	48.0%		38.7%	38.7%		13.3%	52.0%	
Maximum Green (s)	30.1	30.1		30.1	30.1		23.0	23.0		5.0	33.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		24.3			24.3			25.5		34.2	33.2	
Actuated g/C Ratio		0.35			0.35			0.37		0.49	0.48	
v/c Ratio		0.61			0.89			0.51		0.19	0.24	
Control Delay		22.5			41.2			22.2		12.3	11.5	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		22.5			41.2			22.2		12.3	11.5	
LOS		C			D			C		B	B	
Approach Delay		22.5			41.2			22.2			11.8	
Approach LOS		C			D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 69.5
 Natural Cycle: 75
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 26.3
 Intersection LOS: C
 Intersection Capacity Utilization 90.1%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 24 Background 2034 PM Peak

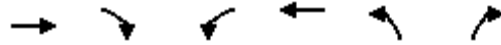
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	4	2	1	4	5	349	3	4	268	4
Future Volume (Veh/h)	0	0	4	2	1	4	5	349	3	4	268	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	4	2	1	4	5	379	3	4	291	4
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	694	693	293	694	692	379	295			382		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	694	693	293	694	692	379	295			382		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	99	100	99	100			100		
cM capacity (veh/h)	344	357	732	352	363	666	1244			1155		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	4	7	384	3	299							
Volume Left	0	2	5	0	4							
Volume Right	4	4	0	3	4							
cSH	732	485	1244	1700	1155							
Volume to Capacity	0.01	0.01	0.00	0.00	0.00							
Queue Length 95th (m)	0.1	0.3	0.1	0.0	0.1							
Control Delay (s)	9.9	12.5	0.1	0.0	0.1							
Lane LOS	A	B	A		A							
Approach Delay (s)	9.9	12.5	0.1		0.1							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			31.2%		ICU Level of Service				A			
Analysis Period (min)			15									

15: Malcolm Street & Strathburn Street
 24 Background 2034 PM Peak

07/08/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↶	↷
Traffic Volume (veh/h)	0	6	2	0	13	2
Future Volume (Veh/h)	0	6	2	0	13	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	0	14	2
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			7		8	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		8	4
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1614		1012	1080
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	7	2	16			
Volume Left	0	2	14			
Volume Right	7	0	2			
cSH	1700	1614	1020			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (m)	0.0	0.0	0.4			
Control Delay (s)	0.0	7.2	8.6			
Lane LOS			A			
Approach Delay (s)	0.0	7.2	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.1			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street
 24 Background 2034 PM Peak

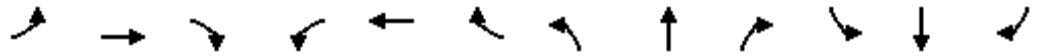
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	303	0	1	491	35	0	1	1	20	0	7
Future Volume (Veh/h)	1	303	0	1	491	35	0	1	1	20	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	329	0	1	534	38	0	1	1	22	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	572			335			904	911	335	888	892	557
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	572			335			904	911	335	888	892	557
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	92	100	98
cM capacity (veh/h)	930			1222			252	273	706	263	280	478
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	330	573	2	30								
Volume Left	1	1	0	22								
Volume Right	0	38	1	8								
cSH	930	1222	394	299								
Volume to Capacity	0.00	0.00	0.01	0.10								
Queue Length 95th (m)	0.0	0.0	0.1	2.5								
Control Delay (s)	0.0	0.0	14.2	18.4								
Lane LOS	A	A	B	C								
Approach Delay (s)	0.0	0.0	14.2	18.4								
Approach LOS			B	C								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			44.3%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 31 Total 2029 AM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	29	174	17	90	68	53	10	103	60	178	140	35
Future Volume (vph)	29	174	17	90	68	53	10	103	60	178	140	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99					1.00	1.00	
Frt		0.990			0.966			0.953			0.970	
Flt Protected		0.993			0.979			0.997		0.950		
Satd. Flow (prot)	0	1741	0	0	1700	0	0	1690	0	1722	1721	0
Flt Permitted		0.936			0.719			0.981		0.577		
Satd. Flow (perm)	0	1641	0	0	1248	0	0	1663	0	1045	1721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25			38			23	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	32	189	18	98	74	58	11	112	65	193	152	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	239	0	0	230	0	0	188	0	193	190	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 31 Total 2029 AM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		30.0	30.0		10.0	30.0	
Total Split (s)	33.0	33.0		33.0	33.0		31.0	31.0		11.0	42.0	
Total Split (%)	44.0%	44.0%		44.0%	44.0%		41.3%	41.3%		14.7%	56.0%	
Maximum Green (s)	27.1	27.1		27.1	27.1		25.0	25.0		6.0	36.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		15.9			15.9			25.2		37.3	36.3	
Actuated g/C Ratio		0.25			0.25			0.39		0.58	0.57	
v/c Ratio		0.58			0.70			0.28		0.29	0.19	
Control Delay		26.1			31.1			13.4		9.1	7.9	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		26.1			31.1			13.4		9.1	7.9	
LOS		C			C			B		A	A	
Approach Delay		26.1			31.1			13.4			8.5	
Approach LOS		C			C			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	75
Actuated Cycle Length:	64.2
Natural Cycle:	75
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	18.4
Intersection LOS:	B
Intersection Capacity Utilization:	75.4%
ICU Level of Service:	D
Analysis Period (min):	15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street

31 Total 2029 AM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	5	35	1	2	2	186	5	2	273	0
Future Volume (Veh/h)	0	0	5	35	1	2	2	186	5	2	273	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	5	38	1	2	2	202	5	2	297	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	510	512	297	512	507	202	297			207		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	510	512	297	512	507	202	297			207		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	92	100	100	100			100		
cM capacity (veh/h)	462	455	728	467	466	836	1242			1341		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	5	41	204	5	299							
Volume Left	0	38	2	0	2							
Volume Right	5	2	0	5	0							
cSH	728	477	1242	1700	1341							
Volume to Capacity	0.01	0.09	0.00	0.00	0.00							
Queue Length 95th (m)	0.2	2.1	0.0	0.0	0.0							
Control Delay (s)	10.0	13.3	0.1	0.0	0.1							
Lane LOS	A	B	A		A							
Approach Delay (s)	10.0	13.3	0.1		0.1							
Approach LOS	A	B										
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			31.4%		ICU Level of Service				A			
Analysis Period (min)			15									

6: County Road 29 & Street 1
 31 Total 2029 AM Peak

07/08/2025

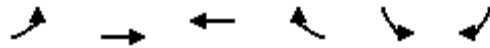


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	21	168	20	7	214
Future Volume (Veh/h)	61	21	168	20	7	214
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	66	23	183	22	8	233
Pedestrians						
Lane 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	443	194			205	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	443	194			205	
tC, single (s)	6.4	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	88	97			99	
cM capacity (veh/h)	569	847			1343	
Direction, Lane #						
	WB 1	NB 1	SB 1			
Volume Total	89	205	241			
Volume Left	66	0	8			
Volume Right	23	22	0			
cSH	622	1700	1343			
Volume to Capacity	0.14	0.12	0.01			
Queue Length 95th (m)	3.8	0.0	0.1			
Control Delay (s)	11.8	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	11.8	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization		28.2%		ICU Level of Service		A
Analysis Period (min)			15			

8: Strathburn Street & Street 2

31 Total 2029 AM Peak

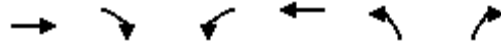
07/08/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	3	8	7	0	35
Future Volume (Veh/h)	5	3	8	7	0	35
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	3	9	8	0	38
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	17				26	13
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17				26	13
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	96
cM capacity (veh/h)	1594				986	1067
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	17	38			
Volume Left	5	0	0			
Volume Right	0	8	38			
cSH	1594	1700	1067			
Volume to Capacity	0.00	0.01	0.04			
Queue Length 95th (m)	0.1	0.0	0.8			
Control Delay (s)	4.5	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	4.5	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			5.7			
Intersection Capacity Utilization		14.6%		ICU Level of Service		A
Analysis Period (min)			15			

15: Malcolm Street & Strathburn Street
 31 Total 2029 AM Peak

07/08/2025



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Volume (veh/h)	0	3	1	1	14	1
Future Volume (Veh/h)	0	3	1	1	14	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	1	15	1
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			3		4	2
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3		4	2
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1619		1017	1083
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	3	2	16			
Volume Left	0	1	15			
Volume Right	3	0	1			
cSH	1700	1619	1021			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (m)	0.0	0.0	0.4			
Control Delay (s)	0.0	3.6	8.6			
Lane LOS			A			
Approach Delay (s)	0.0	3.6	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.9			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street

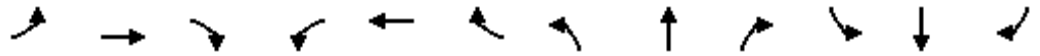
31 Total 2029 AM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	352	0	0	230	23	0	0	0	22	0	1
Future Volume (Veh/h)	2	352	0	0	230	23	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	383	0	0	250	25	0	0	0	24	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	276			385			654	665	386	652	652	266
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	276			385			654	665	386	652	652	266
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	94	100	100
cM capacity (veh/h)	1205			1173			378	380	661	380	386	707
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	385	275	0	25								
Volume Left	2	0	0	24								
Volume Right	0	25	0	1								
cSH	1205	1173	1700	388								
Volume to Capacity	0.00	0.00	0.01	0.06								
Queue Length 95th (m)	0.0	0.0	0.0	1.6								
Control Delay (s)	0.1	0.0	0.0	14.9								
Lane LOS	A		A	B								
Approach Delay (s)	0.1	0.0	0.0	14.9								
Approach LOS			A	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			30.8%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 32 Total 2029 PM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Volume (vph)	43	226	50	82	222	133	38	188	70	117	150	45
Future Volume (vph)	43	226	50	82	222	133	38	188	70	117	150	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99					1.00	1.00	
Frt		0.979			0.959			0.968			0.965	
Flt Protected		0.993			0.991			0.994		0.950		
Satd. Flow (prot)	0	1713	0	0	1703	0	0	1710	0	1722	1709	0
Flt Permitted		0.875			0.829			0.936		0.442		
Satd. Flow (perm)	0	1509	0	0	1425	0	0	1610	0	800	1709	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			34			22			26	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	47	246	54	89	241	145	41	204	76	127	163	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	347	0	0	475	0	0	321	0	127	212	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street
 32 Total 2029 PM Peak

07/08/2025

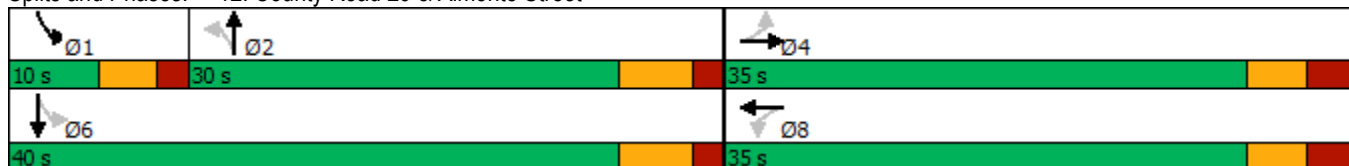


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		10.0	40.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		40.0%	40.0%		13.3%	53.3%	
Maximum Green (s)	29.1	29.1		29.1	29.1		24.0	24.0		5.0	34.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		25.2			25.2			26.4		35.2	34.2	
Actuated g/C Ratio		0.35			0.35			0.37		0.49	0.48	
v/c Ratio		0.64			0.90			0.53		0.28	0.25	
Control Delay		24.3			43.4			22.5		12.8	11.6	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		24.3			43.4			22.5		12.8	11.6	
LOS		C			D			C		B	B	
Approach Delay		24.3			43.4			22.5			12.0	
Approach LOS		C			D			C			B	

Intersection Summary

Area Type:	Other
Cycle Length:	75
Actuated Cycle Length:	71.3
Natural Cycle:	75
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	27.2
Intersection LOS:	C
Intersection Capacity Utilization:	86.9%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 32 Total 2029 PM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	4	22	1	5	5	399	16	7	293	4
Future Volume (Veh/h)	0	0	4	22	1	5	5	399	16	7	293	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	4	24	1	5	5	434	17	8	318	4
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	786	797	320	784	782	434	322			451		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	786	797	320	784	782	434	322			451		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	92	100	99	100			99		
cM capacity (veh/h)	297	309	707	305	321	620	1216			1089		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	4	30	439	17	330							
Volume Left	0	24	5	0	8							
Volume Right	4	5	0	17	4							
cSH	707	334	1216	1700	1089							
Volume to Capacity	0.01	0.09	0.00	0.01	0.01							
Queue Length 95th (m)	0.1	2.2	0.1	0.0	0.2							
Control Delay (s)	10.1	16.8	0.1	0.0	0.3							
Lane LOS	B	C	A		A							
Approach Delay (s)	10.1	16.8	0.1		0.3							
Approach LOS	B	C										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			38.3%		ICU Level of Service				A			
Analysis Period (min)			15									

6: County Road 29 & Street 1
 32 Total 2029 PM Peak

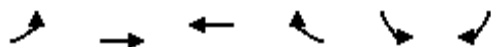
07/08/2025



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	38	13	338	66	23	267
Future Volume (Veh/h)	38	13	338	66	23	267
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	14	367	72	25	290
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	743	403			439	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	743	403			439	
tC, single (s)	6.4	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	89	98			98	
cM capacity (veh/h)	374	647			1100	
Direction, Lane #						
	WB 1	NB 1	SB 1			
Volume Total	55	439	315			
Volume Left	41	0	25			
Volume Right	14	72	0			
cSH	419	1700	1100			
Volume to Capacity	0.13	0.26	0.02			
Queue Length 95th (m)	3.4	0.0	0.5			
Control Delay (s)	14.9	0.0	0.9			
Lane LOS	B		A			
Approach Delay (s)	14.9	0.0	0.9			
Approach LOS	B					
Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization		43.1%		ICU Level of Service		A
Analysis Period (min)			15			

8: Strathburn Street & Street 2
32 Total 2029 PM Peak

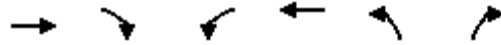
07/08/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	6	13	22	0	22
Future Volume (Veh/h)	16	6	13	22	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	7	14	24	0	24
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	38				67	26
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	38				67	26
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	98
cM capacity (veh/h)	1566				928	1050
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	24	38	24			
Volume Left	17	0	0			
Volume Right	0	24	24			
cSH	1566	1700	1050			
Volume to Capacity	0.01	0.02	0.02			
Queue Length 95th (m)	0.3	0.0	0.5			
Control Delay (s)	5.2	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	5.2	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			3.8			
Intersection Capacity Utilization			17.9%	ICU Level of Service	A	
Analysis Period (min)			15			

15: Malcolm Street & Strathburn Street
 32 Total 2029 PM Peak

07/08/2025

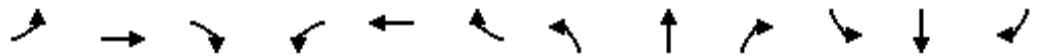


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↶	↷
Traffic Volume (veh/h)	0	6	2	0	35	2
Future Volume (Veh/h)	0	6	2	0	35	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	0	38	2
Pedestrians						
Lane Width (m)						
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			7		8	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		8	4
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	100
cM capacity (veh/h)			1614		1012	1080
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	7	2	40			
Volume Left	0	2	38			
Volume Right	7	0	2			
cSH	1700	1614	1015			
Volume to Capacity	0.00	0.00	0.04			
Queue Length 95th (m)	0.0	0.0	0.9			
Control Delay (s)	0.0	7.2	8.7			
Lane LOS			A			
Approach Delay (s)	0.0	7.2	8.7			
Approach LOS			A			
Intersection Summary						
Average Delay			7.4			
Intersection Capacity Utilization			13.3%	ICU Level of Service		A
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street

32 Total 2029 PM Peak

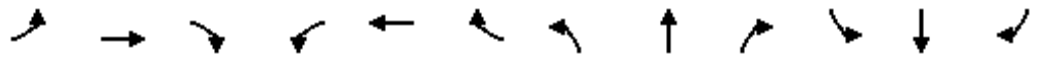
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	326	0	1	510	57	0	1	1	20	0	7
Future Volume (Veh/h)	1	326	0	1	510	57	0	1	1	20	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	354	0	1	554	62	0	1	1	22	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	616			360			961	980	360	944	949	589
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	616			360			961	980	360	944	949	589
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	91	100	98
cM capacity (veh/h)	895			1197			230	249	683	240	259	458
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	355	617	2	30								
Volume Left	1	1	0	22								
Volume Right	0	62	1	8								
cSH	895	1197	365	275								
Volume to Capacity	0.00	0.00	0.01	0.11								
Queue Length 95th (m)	0.0	0.0	0.1	2.8								
Control Delay (s)	0.0	0.0	14.9	19.7								
Lane LOS	A	A	B	C								
Approach Delay (s)	0.0	0.0	14.9	19.7								
Approach LOS			B	C								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			46.6%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 33 Total 2034 AM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	31	182	18	94	71	55	10	108	63	183	145	36
Future Volume (vph)	31	182	18	94	71	55	10	108	63	183	145	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99					1.00	1.00	
Frt		0.989			0.966			0.953			0.970	
Flt Protected		0.993			0.979			0.997		0.950		
Satd. Flow (prot)	0	1739	0	0	1700	0	0	1691	0	1722	1721	0
Flt Permitted		0.933			0.703			0.981		0.561		
Satd. Flow (perm)	0	1634	0	0	1220	0	0	1663	0	1016	1721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25			38			23	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	34	198	20	102	77	60	11	117	68	199	158	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	252	0	0	239	0	0	196	0	199	197	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street

33 Total 2034 AM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		30.0	30.0		10.0	33.0	
Total Split (s)	32.9	32.9		32.9	32.9		30.1	30.1		12.0	42.1	
Total Split (%)	43.9%	43.9%		43.9%	43.9%		40.1%	40.1%		16.0%	56.1%	
Maximum Green (s)	27.0	27.0		27.0	27.0		24.1	24.1		7.0	36.1	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		16.4			16.4			24.4		37.4	36.4	
Actuated g/C Ratio		0.25			0.25			0.38		0.58	0.56	
v/c Ratio		0.60			0.73			0.30		0.30	0.20	
Control Delay		26.7			32.9			14.4		9.4	8.2	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		26.7			32.9			14.4		9.4	8.2	
LOS		C			C			B		A	A	
Approach Delay		26.7			32.9			14.4			8.8	
Approach LOS		C			C			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 64.8

Natural Cycle: 75

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 19.3

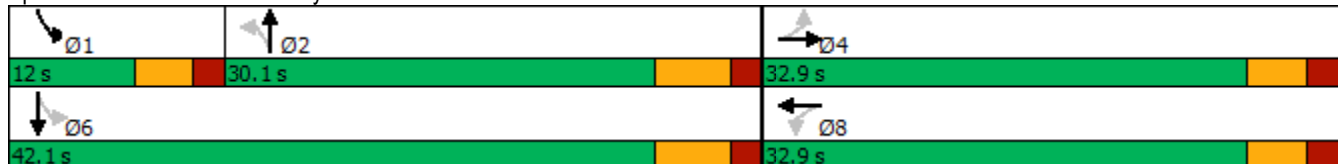
Intersection LOS: B

Intersection Capacity Utilization 76.4%

ICU Level of Service D


















Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street
 33 Total 2034 AM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	5	35	1	2	2	194	5	2	283	0
Future Volume (Veh/h)	0	0	5	35	1	2	2	194	5	2	283	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	5	38	1	2	2	211	5	2	308	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	530	532	308	532	527	211	308			216		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	530	532	308	532	527	211	308			216		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	92	100	100	100			100		
cM capacity (veh/h)	448	444	718	452	453	827	1230			1330		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	5	41	213	5	310							
Volume Left	0	38	2	0	2							
Volume Right	5	2	0	5	0							
cSH	718	463	1230	1700	1330							
Volume to Capacity	0.01	0.09	0.00	0.00	0.00							
Queue Length 95th (m)	0.2	2.2	0.0	0.0	0.0							
Control Delay (s)	10.0	13.5	0.1	0.0	0.1							
Lane LOS	B	B	A		A							
Approach Delay (s)	10.0	13.5	0.1		0.1							
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			31.9%		ICU Level of Service				A			
Analysis Period (min)			15									

6: County Road 29 & Street 1
 33 Total 2034 AM Peak

07/08/2025

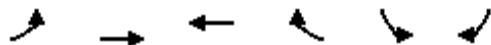


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	21	176	20	7	224
Future Volume (Veh/h)	61	21	176	20	7	224
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	66	23	191	22	8	243
Pedestrians						
Lane 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	461	202			213	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	461	202			213	
tC, single (s)	6.4	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	88	97			99	
cM capacity (veh/h)	555	839			1334	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	89	213	251			
Volume Left	66	0	8			
Volume Right	23	22	0			
cSH	608	1700	1334			
Volume to Capacity	0.15	0.13	0.01			
Queue Length 95th (m)	3.9	0.0	0.1			
Control Delay (s)	11.9	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	11.9	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			28.8%	ICU Level of Service		A
Analysis Period (min)	15					

8: Strathburn Street & Street 2

33 Total 2034 AM Peak

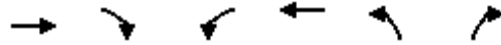
07/08/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↘	
Traffic Volume (veh/h)	5	3	8	7	0	35
Future Volume (Veh/h)	5	3	8	7	0	35
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	3	9	8	0	38
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	17				26	13
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17				26	13
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	96
cM capacity (veh/h)	1594				986	1067
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	17	38			
Volume Left	5	0	0			
Volume Right	0	8	38			
cSH	1594	1700	1067			
Volume to Capacity	0.00	0.01	0.04			
Queue Length 95th (m)	0.1	0.0	0.8			
Control Delay (s)	4.5	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	4.5	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			5.7			
Intersection Capacity Utilization		14.6%		ICU Level of Service		A
Analysis Period (min)			15			

15: Malcolm Street & Strathburn Street
 33 Total 2034 AM Peak

07/08/2025



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	3	1	1	14	1
Future Volume (Veh/h)	0	3	1	1	14	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	1	15	1
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			3		4	2
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			3		4	2
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1619		1017	1083
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	3	2	16			
Volume Left	0	1	15			
Volume Right	3	0	1			
cSH	1700	1619	1021			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (m)	0.0	0.0	0.4			
Control Delay (s)	0.0	3.6	8.6			
Lane LOS		A	A			
Approach Delay (s)	0.0	3.6	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay			6.9			
Intersection Capacity Utilization			13.3%		ICU Level of Service	A
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street

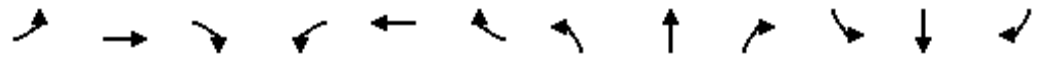
33 Total 2034 AM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	365	0	0	241	23	0	0	0	22	0	1
Future Volume (Veh/h)	2	365	0	0	241	23	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	397	0	0	262	25	0	0	0	24	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	288			399			680	691	400	678	678	278
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	288			399			680	691	400	678	678	278
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	93	100	100
cM capacity (veh/h)	1192			1159			363	367	649	365	373	696
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	399	287	0	25								
Volume Left	2	0	0	24								
Volume Right	0	25	0	1								
cSH	1192	1159	1700	373								
Volume to Capacity	0.00	0.00	0.01	0.07								
Queue Length 95th (m)	0.0	0.0	0.0	1.6								
Control Delay (s)	0.1	0.0	0.0	15.4								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	15.4								
Approach LOS			A	C								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			31.4%		ICU Level of Service				A			
Analysis Period (min)			15									

12: County Road 29 & Almonte Street
 34 Total 2034 PM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Volume (vph)	44	236	52	85	232	138	40	196	73	120	156	47
Future Volume (vph)	44	236	52	85	232	138	40	196	73	120	156	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		0.0	65.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	2.5			2.5			2.5			80.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99					1.00	1.00	
Frt		0.979			0.959			0.968			0.965	
Flt Protected		0.993			0.991			0.994		0.950		
Satd. Flow (prot)	0	1713	0	0	1703	0	0	1710	0	1722	1709	0
Flt Permitted		0.877			0.827			0.933		0.423		
Satd. Flow (perm)	0	1513	0	0	1421	0	0	1605	0	766	1709	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			35			21			26	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		205.6			469.8			144.7			188.3	
Travel Time (s)		14.8			33.8			10.4			13.6	
Confl. Peds. (#/hr)	1						1			1		1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	7%	14%	6%	7%	6%	12%	7%	9%	6%	7%	11%
Adj. Flow (vph)	48	257	57	92	252	150	43	213	79	130	170	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	362	0	0	494	0	0	335	0	130	221	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			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97		97	97		97	97		97	97		97
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	

12: County Road 29 & Almonte Street

34 Total 2034 PM Peak

07/08/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	32.9	32.9		32.9	32.9		29.0	29.0		10.0	29.0	
Total Split (s)	36.0	36.0		36.0	36.0		29.0	29.0		10.0	39.0	
Total Split (%)	48.0%	48.0%		48.0%	48.0%		38.7%	38.7%		13.3%	52.0%	
Maximum Green (s)	30.1	30.1		30.1	30.1		23.0	23.0		5.0	33.0	
Yellow Time (s)	3.3	3.3		3.3	3.3		4.2	4.2		3.3	4.2	
All-Red Time (s)	2.6	2.6		2.6	2.6		1.8	1.8		1.7	1.8	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		5.9			5.9			6.0		5.0	6.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
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		None	Max	
Walk Time (s)	13.0	13.0		13.0	13.0		13.0	13.0			13.0	
Flash Dont Walk (s)	14.0	14.0		14.0	14.0		10.0	10.0			10.0	
Pedestrian Calls (#/hr)	1	1		1	1		1	1			1	
Act Effct Green (s)		26.1			26.1			25.4		34.2	33.2	
Actuated g/C Ratio		0.37			0.37			0.36		0.48	0.47	
v/c Ratio		0.64			0.91			0.57		0.30	0.27	
Control Delay		23.5			43.2			24.4		13.7	12.3	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		23.5			43.2			24.4		13.7	12.3	
LOS		C			D			C		B	B	
Approach Delay		23.5			43.2			24.4			12.9	
Approach LOS		C			D			C			B	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 71.2

Natural Cycle: 75

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 27.6

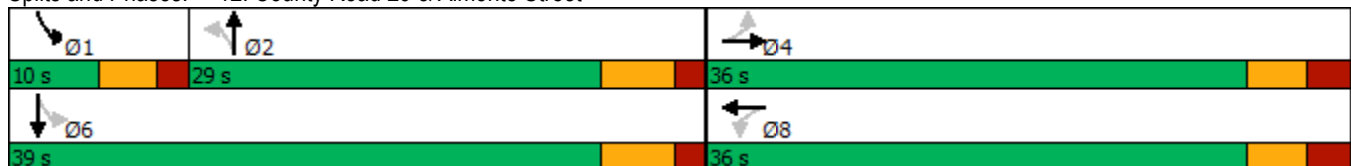
Intersection LOS: C

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: County Road 29 & Almonte Street



3: County Road 29 & Gleeson Road/Strathburn Street

34 Total 2034 PM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Volume (veh/h)	0	0	4	22	1	5	5	415	16	7	306	4
Future Volume (Veh/h)	0	0	4	22	1	5	5	415	16	7	306	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	4	24	1	5	5	451	17	8	333	4
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	818	829	335	816	814	451	337			468		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	818	829	335	816	814	451	337			468		
tC, single (s)	7.2	6.6	6.3	7.1	6.5	6.2	4.2			4.2		
tC, 2 stage (s)												
tF (s)	3.6	4.1	3.4	3.5	4.0	3.3	2.3			2.3		
p0 queue free %	100	100	99	92	100	99	100			99		
cM capacity (veh/h)	283	296	693	290	307	606	1200			1073		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	4	30	456	17	345							
Volume Left	0	24	5	0	8							
Volume Right	4	5	0	17	4							
cSH	693	318	1200	1700	1073							
Volume to Capacity	0.01	0.09	0.00	0.01	0.01							
Queue Length 95th (m)	0.1	2.4	0.1	0.0	0.2							
Control Delay (s)	10.2	17.5	0.1	0.0	0.3							
Lane LOS	B	C	A		A							
Approach Delay (s)	10.2	17.5	0.1		0.3							
Approach LOS	B	C										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			39.2%		ICU Level of Service				A			
Analysis Period (min)			15									

6: County Road 29 & Street 1
 34 Total 2034 PM Peak

07/08/2025

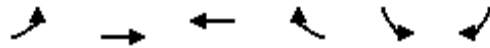


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	38	13	354	66	23	279
Future Volume (Veh/h)	38	13	354	66	23	279
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	14	385	72	25	303
Pedestrians						
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	774	421			457	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	774	421			457	
tC, single (s)	6.4	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	89	98			98	
cM capacity (veh/h)	358	632			1083	
Direction, Lane #						
	WB 1	NB 1	SB 1			
Volume Total	55	457	328			
Volume Left	41	0	25			
Volume Right	14	72	0			
cSH	403	1700	1083			
Volume to Capacity	0.14	0.27	0.02			
Queue Length 95th (m)	3.6	0.0	0.5			
Control Delay (s)	15.3	0.0	0.9			
Lane LOS	C		A			
Approach Delay (s)	15.3	0.0	0.9			
Approach LOS	C					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization		43.7%		ICU Level of Service		A
Analysis Period (min)			15			

8: Strathburn Street & Street 2

34 Total 2034 PM Peak

07/08/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	6	13	22	0	22
Future Volume (Veh/h)	16	6	13	22	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	7	14	24	0	24
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	38				67	26
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	38				67	26
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	98
cM capacity (veh/h)	1566				928	1050
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	24	38	24			
Volume Left	17	0	0			
Volume Right	0	24	24			
cSH	1566	1700	1050			
Volume to Capacity	0.01	0.02	0.02			
Queue Length 95th (m)	0.3	0.0	0.5			
Control Delay (s)	5.2	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	5.2	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			3.8			
Intersection Capacity Utilization			17.9%	ICU Level of Service	A	
Analysis Period (min)			15			

15: Malcolm Street & Strathburn Street

34 Total 2034 PM Peak

07/08/2025



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Volume (veh/h)	0	6	2	0	35	2
Future Volume (Veh/h)	0	6	2	0	35	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	2	0	38	2
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			7		8	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			7		8	4
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	100
cM capacity (veh/h)			1614		1012	1080
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	7	2	40			
Volume Left	0	2	38			
Volume Right	7	0	2			
cSH	1700	1614	1015			
Volume to Capacity	0.00	0.00	0.04			
Queue Length 95th (m)	0.0	0.0	0.9			
Control Delay (s)	0.0	7.2	8.7			
Lane LOS		A	A			
Approach Delay (s)	0.0	7.2	8.7			
Approach LOS			A			
Intersection Summary						
Average Delay			7.4			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

16: Malcolm Street & Almonte Street

34 Total 2034 PM Peak

07/08/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	340	0	1	532	57	0	1	1	20	0	7
Future Volume (Veh/h)	1	340	0	1	532	57	0	1	1	20	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	370	0	1	578	62	0	1	1	22	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	640			376			1001	1020	376	984	989	613
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	640			376			1001	1020	376	984	989	613
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	90	100	98
cM capacity (veh/h)	876			1180			216	236	669	226	246	443
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	371	641	2	30								
Volume Left	1	1	0	22								
Volume Right	0	62	1	8								
cSH	876	1180	349	260								
Volume to Capacity	0.00	0.00	0.01	0.12								
Queue Length 95th (m)	0.0	0.0	0.1	2.9								
Control Delay (s)	0.0	0.0	15.4	20.7								
Lane LOS	A	A	C	C								
Approach Delay (s)	0.0	0.0	15.4	20.7								
Approach LOS			C	C								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			47.8%		ICU Level of Service				A			
Analysis Period (min)			15									

16: Malcolm Street & Almonte Street
 41 Sensitivity 2034 AM Peak

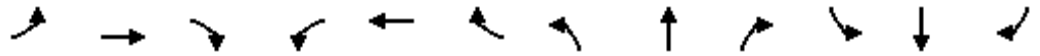
07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	2	306	0	0	229	35	0	0	0	81	0	1
Future Volume (Veh/h)	2	306	0	0	229	35	0	0	0	81	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	333	0	0	249	38	0	0	0	88	0	1
Pedestrians		2			1			2			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		3.5			3.5			3.5			3.5	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	288			335			610	627	336	607	608	271
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	288			335			610	627	336	607	608	271
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	78	100	100
cM capacity (veh/h)	1192			1224			405	399	705	407	409	702
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	335	287	0	89								
Volume Left	2	0	0	88								
Volume Right	0	38	0	1								
cSH	1192	1224	1700	409								
Volume to Capacity	0.00	0.00	0.01	0.22								
Queue Length 95th (m)	0.0	0.0	0.0	6.2								
Control Delay (s)	0.1	0.0	0.0	16.2								
Lane LOS	A		A	C								
Approach Delay (s)	0.1	0.0	0.0	16.2								
Approach LOS			A	C								
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			32.7%		ICU Level of Service				A			
Analysis Period (min)			15									

16: Malcolm Street & Almonte Street
 42 Sensitivity 2034 PM Peak

07/08/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	303	0	1	491	98	0	1	1	57	0	7
Future Volume (Veh/h)	1	303	0	1	491	98	0	1	1	57	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	329	0	1	534	107	0	1	1	62	0	8
Pedestrians		4						6				
Lane Width (m)		3.7						3.7				
Walking Speed (m/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	641			335			938	980	335	922	926	592
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	641			335			938	980	335	922	926	592
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	100			100			100	100	100	75	100	98
cM capacity (veh/h)	876			1222			239	249	706	249	267	456
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	330	642	2	70								
Volume Left	1	1	0	62								
Volume Right	0	107	1	8								
cSH	876	1222	368	262								
Volume to Capacity	0.00	0.00	0.01	0.27								
Queue Length 95th (m)	0.0	0.0	0.1	7.9								
Control Delay (s)	0.0	0.0	14.8	23.6								
Lane LOS	A	A	B	C								
Approach Delay (s)	0.0	0.0	14.8	23.6								
Approach LOS			B	C								
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			49.9%		ICU Level of Service				A			
Analysis Period (min)			15									