Appendix A

Safety Performance Functions

The Safety Performance Function was calculated based upon the Regional Municipality of Peel's functions, summarized below:

Peel Region's Safety Performance Functions for 4-legged Signalized Intersections

	Equation	Ln(α)	*b*	*c*	*k*	Pearson Chi-Square
All Collisions	$E(Y) = \alpha \times F_{maj}^{b} \times F_{min}^{c}$	-11.6363	0.6546	0.7817	0.2820	1.1146
Severe	$E(Y) = \alpha \times F_{maj}^{b} \times F_{min}^{c}$	-11.2613	0.5507	0.6644	0.2604	1.0973
PDO	$E(Y) = \alpha \times F_{maj}^{b} \times F_{min}^{c}$	-12.4550	0.6950	0.8049	0.2856	1.1131

The functions for "All Collisions", "Severe" and "PDO" were used to determine the predicted number of collisions. The traffic volumes were developed as follows:

- **F_{maj}**: The sum of the eastbound and westbound AADT's on Derry Road; the eastbound AADT came from a location west of the intersection and the westbound AADT came from a location to the east of the intersection
- **F_{min}**: The sum of the northbound and southbound AADT's on Argentia Road; the northbound AADT came from a location south of the intersection and the southbound AADT came from a location to the north of the intersection.

The AADT counts are shown in **Exhibit A-1**. The Derry Road AADT counts are from Peel Region's 2011 and 2012 AADT data, and the Argentia Road AADT counts are from the City of Mississauga's 2012 AADT data.

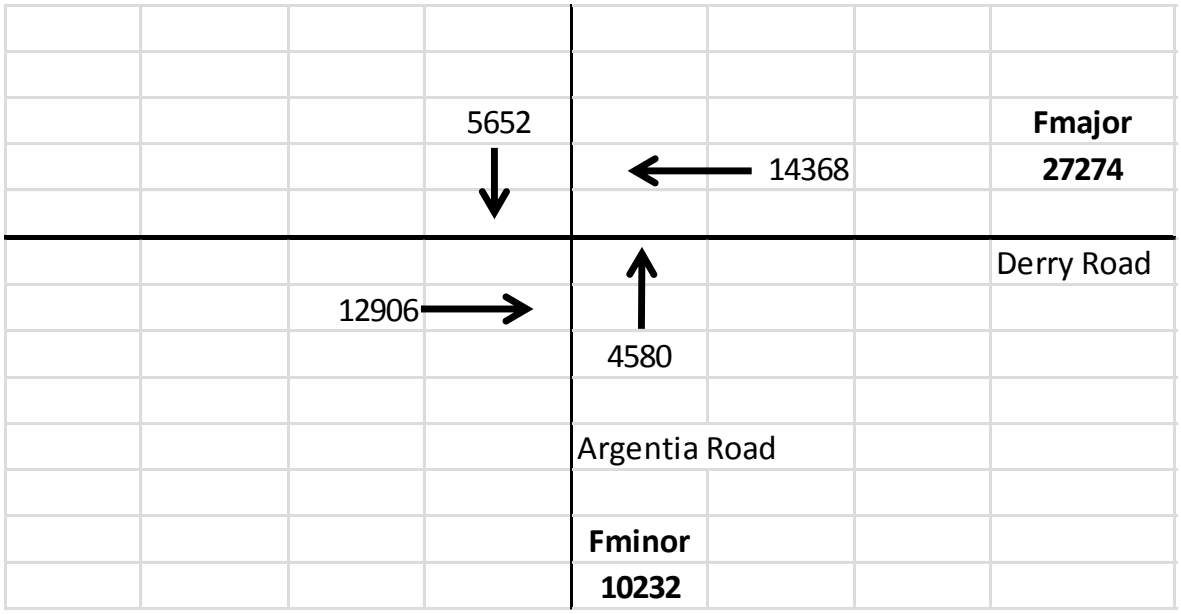


Exhibit A-1: AADT Volumes on Derry Road and Argentia Road

The calculation of the predicted and expected number of collisions is shown below.

Collision Data

Years	**5**
All Collisions	
	Derry and Argentia
Observed Col	**82**
Fmaj (Derry)	27274
Fmin (Argentia)	10232
Step 1	
Predicted Col/yr	**9.65**
Predicted Col	**48.26**
Step 2	
Weights	**0.07**
Step 3	
Expected	**79.69**
Severe (Injury)	
	Derry and Argentia
Observed Col	**12**
Fmaj (Derry)	27274
Fmin (Argentia)	10232
Step 1	
Predicted Col/yr	**1.65**
Predicted Col	**8.227**
Step 2	
Weights	**0.32**
Step 3	
Expected	**10.80**
PDO	
Predicted Col	40.04
Expected	68.89

Appendix B

Existing Signal Timing Plans

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**October 1, 2012**		**Prepared Date:**	**September 9, 2013**
Database Rev	**34**		**Completed By:**	**MF**
Timing Card / Field rev	**8**		**Checked By:**	**MF**

Location: Derry Rd @ Argentia Rd

Phase #	Direction	Vehicle Minimum (sec.)	Pedestrian Minimum (sec.)		Amber (sec.)	All Red (sec.)	TIME PERIOD (sec.) (Green+Amber+All Red)		
			WALK	FDWALK			AM MAX	OFF MAX	PM MAX
1	WBLT - Derry	5.0			3.0		25.2	9.0	11.2
2	E/B - Derry	8.0	12.0	19.0	4.0	2.1	61.6	39.6	61.6
3	SBLT - Argentia	5.0			3.0		11.2	-	16.8
4	N/B - Argentia	8.0	12.0	20.0	4.0	3.0	42.0	41.4	50.4
5	Not in Use								
6	W/B - Derry	8.0	12.0	19.0	4.0	2.1	86.8	48.6	72.8
7	NBLT - Argentia	5.0			3.0		9.8	-	25.2
8	S/B -Argentia	8.0	12.0	20.0	4.0	3.0	43.4	41.4	42.0

System Control	YES
Local Control	NO
Semi-Actuated Mode	YES

TIME (M-F)	PEAK	CYCLE LENGTH (sec.)	OFFSET (sec.)
06:00-09:30	**AM**	**140**	**95.2**
09:30-15:00	**OFF**	**90**	**15.3**
15:00-19:30	**PM**	**140**	**81.2**

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**September 14, 2011**		**Prepared Date:**	**September 9, 2013**
Database Rev	**41**		**Completed By:**	**MF**
Timing Card / Field rev	**21**		**Checked By:**	**MF**

Location:	**Derry Rd @ Winston Churchill Blvd**						**TIME PERIOD (sec.) (Green+Amber+All Red)**		
Phase #	**Direction**	**Vehicle Minimum (sec.)**	**Pedestrian Minimum (sec.)**		**Amber (sec.)**	**All Red (sec.)**	**AM MAX**	**OFF MAX**	**PM MAX**
			WALK	**FDWALK**					
1	**WBLT - Derry**	5.0			3.0		14.0	-	21.0
2	**E/B - Derry**	8.0	11.0	17.0	4.0	2.9	61.6	61.2	53.2
3	**SB/ Prot LT - W.C.B.**	6.0			3.0	2.0	23.8	16.8	21.0
4	**N/B - W.C.B.**	8.0	11.0	17.0	4.0	2.9	40.6	42.0	44.8
5	**EB/ Prot LT - Derry**	6.0			3.0	2.0	23.8	19.2	21.0
6	**W/B - Derry**	8.0	11.0	17.0	4.0	2.9	51.8	42.0	53.2
7	**NBLT - W.C.B.**	5.0			3.0		-	12.0	21.0
8	**S/B - W.C.B.**	8.0	11.0	17.0	4.0	2.9	64.4	46.8	44.8

System Control	YES
Local Control	NO
Semi-Actuated Mode	No (Fully Actuated)

TIME (M-F)	**PEAK**	**CYCLE LENGTH (sec.)**	**OFFSET (sec.)**
06:00-09:30	**AM**	**140**	**8.4**
09:30-15:00	**OFF**	**120**	**18.0**
15:00-19:30	**PM**	**140**	**47.6**

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**June 24, 2011**	**Prepared Date:**	**September 9, 2013**
Database Rev	**34**	**Completed By:**	**MF**
Timing Card / Field rev	**27**	**Checked By:**	**MF**

Location: Mississauga Rd @ Argentia Rd

Phase #	Direction	Vehicle Minimum (sec.)	Pedestrian Minimum (sec.)		Amber (sec.)	All Red (sec.)	TIME PERIOD (sec.) (Green+Amber+All Red)			
			WALK	FDWALK			AM MAX	OFF 1 MAX	OFF 2 MAX	PM MAX
1	NBLT - EMP	5.0			3.0		-	-	-	12.6
2	S/B - EMP	12.0	8.0	12.0	4.2	2.3	95.2	80.4	68.4	61.6
3	EBLT - Argentia	5.0			3.0		-	-	12.0	26.6
4	W/B - Argentia	8.0	11.0	17.0	4.0	3.8	44.8 (53)	39.6 (42)	39.6 (42)	39.2 (42)
5	S/B Prot LT - EMP	8.0			3.0	2.0	28 (50)	24 (26)	24 (26)	21 (23)
6	N/B - EMP	12.0	8.0	12.0	4.2	2.3	67.2	56.4	44.4	53.2
7	WBLT - Argentia	5.0			3.0		11.2	-	-	22.4
8	E/B - Argentia	8.0	11.0	17.0	4.0	3.8	33.6 (42)	39.6 (42)	51.6 (54)	43.4 (46)

System Control	YES
Local Control	NO
Semi-Actuated Mode	YES

TIME (M-F)	PEAK	CYCLE LENGTH (sec.)	OFFSET (sec.)
06:00-09:30	**AM**	**140**	**96.6**
09:30-12:00 14:00-15:00	**OFF 1**	**120**	**76.8**
12:00-14:00	**OFF 2**	**120**	**88.8**
15:00-19:30	**PM**	**140**	**57.4**

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**April 4, 2011**	**Prepared Date:**	**September 9, 2013**
Database Rev	**63**	**Completed By:**	**MF**
Timing Card / Field rev	**38**	**Checked By:**	**MF**

Location: Mississauga Rd @ Derry Rd

Phase #	Direction	Vehicle Minimum (sec.)	Pedestrian Minimum (sec.)		Amber (sec.)	All Red (sec.)	TIME PERIOD (sec.) (Green+Amber+All Red)		
			WALK	FDWALK			AM MAX	OFF MAX	PM MAX
1	N/B Prot LT - Miss	12.0			3.0	2.0	23.8 (26)	22.8 (25)	23.8 (26)
2	S/B - Miss	12.0	12.0	18.0	5.4	2.4	46.2	40.8	44.8
3	EBLT - Derry	5.0			3.0		23.8	9.6	21.0
4	W/B - Derry	12.0	12.0	18.0	5.4	3.2	46.2 (49)	46.8	50.4 (57)
5	S/B Prot LT - Miss	12.0			3.0	2.0	25.2 (28)	22.8 (25)	23.8 (26)
6	N/B - Miss	12.0	12.0	18.0	5.4	2.4	44.8	40.8	44.8
7	W/B Prot LT - Derry	12.0			3.0	2.0	22.4	24.0	29.4
8	E/B - Derry	12.0	12.0	18.0	5.4	3.2	47.6 (51)	32.4	42 (46)

System Control	YES
Local Control	NO
Semi-Actuated Mode	No (Fully Actuated)

TIME (M-F)	PEAK	CYCLE LENGTH (sec.)	OFFSET (sec.)
06:00-09:30	**AM**	**140**	**16.8**
09:30-15:00	**OFF**	**120**	**24.0**
15:00-19:30	**PM**	**140**	**123.2**

10:59 USER 8/12 PRINT DAILY INT REP, INT 86, AS 1-3

DAILY INTERSECTION REPORT FOR ACT SCH 1 (MON TUE WED THU FRI)

INT	TIME	SELECTION PLANS IN USE					ALTERNATES					
		MODE	CYC LEN	OFF NO.	SPLT NO.	SPEC FUNC	DUP ISEC	MODE	CYC LEN	OFF NO.	SPLT NO.	SPEC FUNC	DUP ISEC
86	00:00	/	/	/	/	/	/	LO	101	2	2	2	
86	06:00	1/1	/	/	/	1/1	/	CC	140	1	1	1	1023
86	09:30	1/1	/	/	/	1/1	/	CC	120	2	2	2	1023
86	15:00	1/1	/	/	/	1/1	/	CC	140	3	3	3	1023
86	19:30	1/1	/	/	/	1/1	/	CC	120	2	2	2	1023

DAILY INTERSECTION REPORT FOR ACT SCH 2 (SAT)

86	00:00	/	/	/	/	/	/	LO	101	2	2	2	
86	07:00	1/1	/	/	/	1/1	/	CC	120	2	2	2	1023

DAILY INTERSECTION REPORT FOR ACT SCH 3 (SUN HOL)

86	00:00	/	/	/	/	/	/	LO	101	2	2	2	
86	08:00	1/1	/	/	/	1/1	/	CC	120	2	2	2	1023
86	23:00	/	/	/	/	/	/	LO	101	2	2	2	1023

```
11:00 USER   8/12 PRINT SPF 1-3, INT 86
  SPECIAL FUNCTIONS
   INTERSECTION   86   WCB @ ARGENTIA
   SPECIAL   IN(Y)/OUT(N)
   FUNCTION  #  1   2   3
               WBL NA  CAL   PHASE OMIT BUT SP2 Y=ON
     1          N   N   N
     2          N   N   N
     3          N   N   N
```

11:00 USER 8/12 PRINT SPLIT 1-3, INT 86

SPLIT TABLE

INTERSECTION 86 WCB @ ARGENTIA

TABLE NO.	(SPLIT) PHASE NUMBER 1	2	3	4	5	6	7	8	(MAX SPLIT) PHASE NUMBER 1	2	3	4	5	6	7	8
	NBL	SB	EBL	WB	SBL	NB	WBL	EB								
1	13	35	19	33	15	33	10	42	21	0	0	0	0	0	0	0
2	19	37	21	23	16	40	13	31	23	0	0	0	23	0	0	0
3	14	35	17	34	14	35	13	38	22	0	0	0	22	0	0	0

```
11:01 USER   8/12 PRINT OFFSET 1-3, INT 86
  OFFSET TABLE
   INTERSECTION   86           WCB @ ARGENTIA
   OFFSET #   OFFSET %
       1          82
       2          85
       3          21
```

11:00 USER 8/12 PRINT CDT 86

CYCLE DEFINITION TABLE: 86

PHASE	DIR	VEH MIN	PED MIN	PED CLEAR	AMBER	ALL RED	COMM DELAY	SPECIAL FEATURE	STREET NAME
1	NBL	7			3	2	1		WCB
2	SB		15	22	4	3	1	C	WCB
3	EBL	7			3	2	1		ARGENTIA ROAD
4	WB	8	15	21	4	3	1	E	ARGENTIA ROAD
5	SBL	7			3	2	1		WCB
6	NB		15	22	4	3	1	C	WCB
7	WBL	5			3		1		ARGENTIA ROAD
8	EB	8	15	21	4	3	1	E	ARGENTIA ROAD

VALID SPECIAL FUNCTIONS(Y/N)

1	2	3	1&2	1&3	2&3	ALL
Y	Y	Y	Y	Y	Y	Y

INT No.: 86

LOCATION: **Winston Churchill @ Argentia**

SCHEDULED DATA

Mode	Cycle Length	OFF No.	Split No.	Spec Func	DUP ISEC
LO	101	2	2	2	1023

PHASING DATA

PHASE	MIN	MAX	WALK	DON'T WALK	AMBER	ALL RED
1. NBLT Protected Arrow	7	15	-	-	3	2
2. SB Winston Churchill	45	N/A	23	22	4	3
3. EBL Protected Arrow	7	15	-	-	3	2
4. WB Argentia	8	25	15	21	4	3
5. SBLT Proteced Arrow	7	15	-	-	3	2
6. NB Winston Churchill	45	N/A	23	22	4	3
7. WBL Arrow	5	15	-	-	3	-
8. EB Argentia	8	25	15	21	4	3

* ALL VALUES IN SECONDS

Appendix C

Existing Turning Movement Counts

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

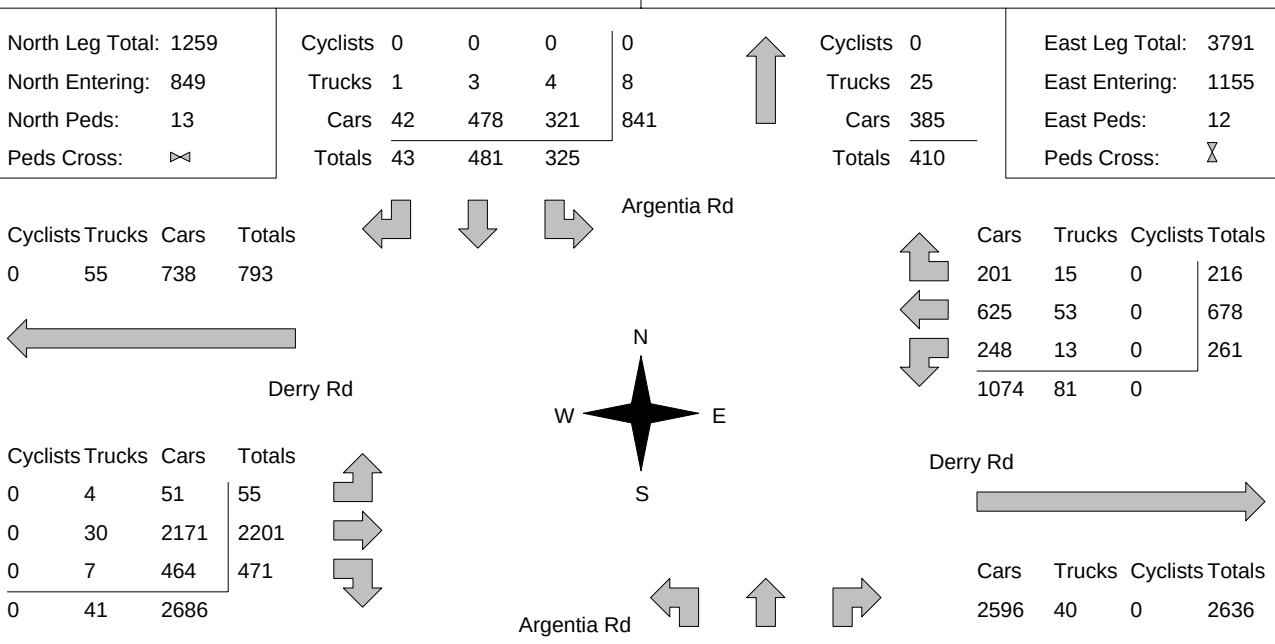
Municipality: Peel
Site #: 0000518131
Intersection: Derry Rd & Argentia Rd
TFR File #: 1
Count date: 15-Feb-11

Weather conditions:
Clear

Person(s) who counted:
Grigory Naftolin
Anna Naftolin

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:30:00
To: 13:30:00

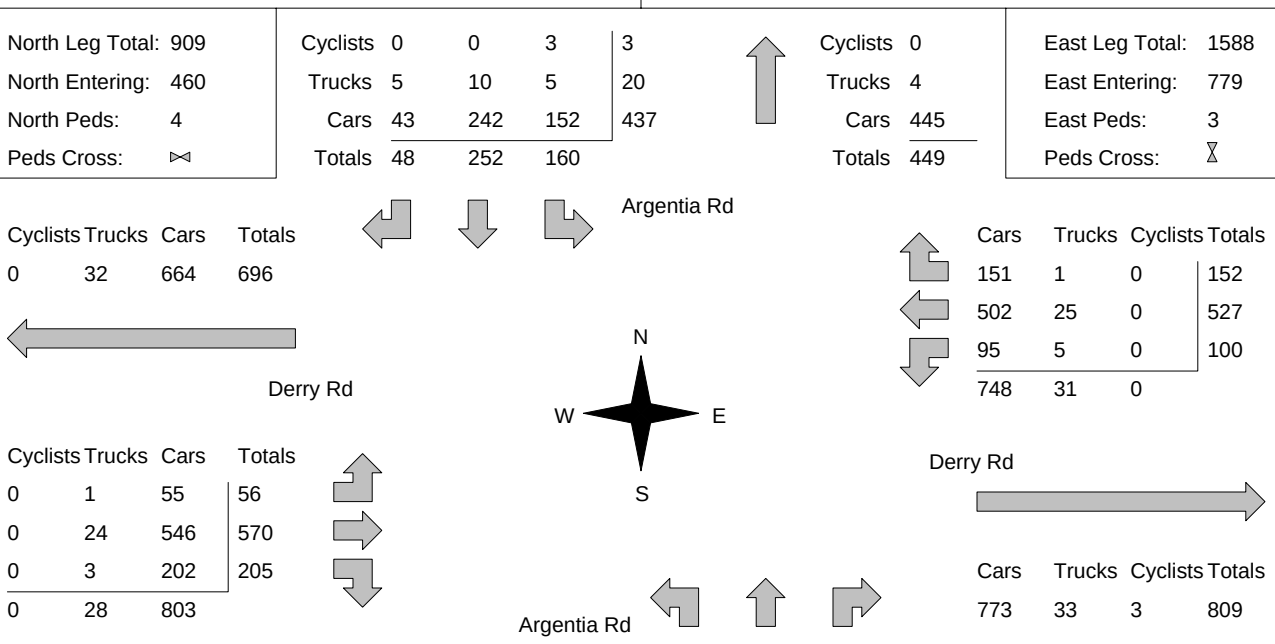
Municipality: Peel
Site #: 0000518131
Intersection: Derry Rd & Argentia Rd
TFR File #: 1
Count date: 15-Feb-11

Weather conditions:
Clear

Person(s) who counted:
Grigory Naftolin
Anna Naftolin

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

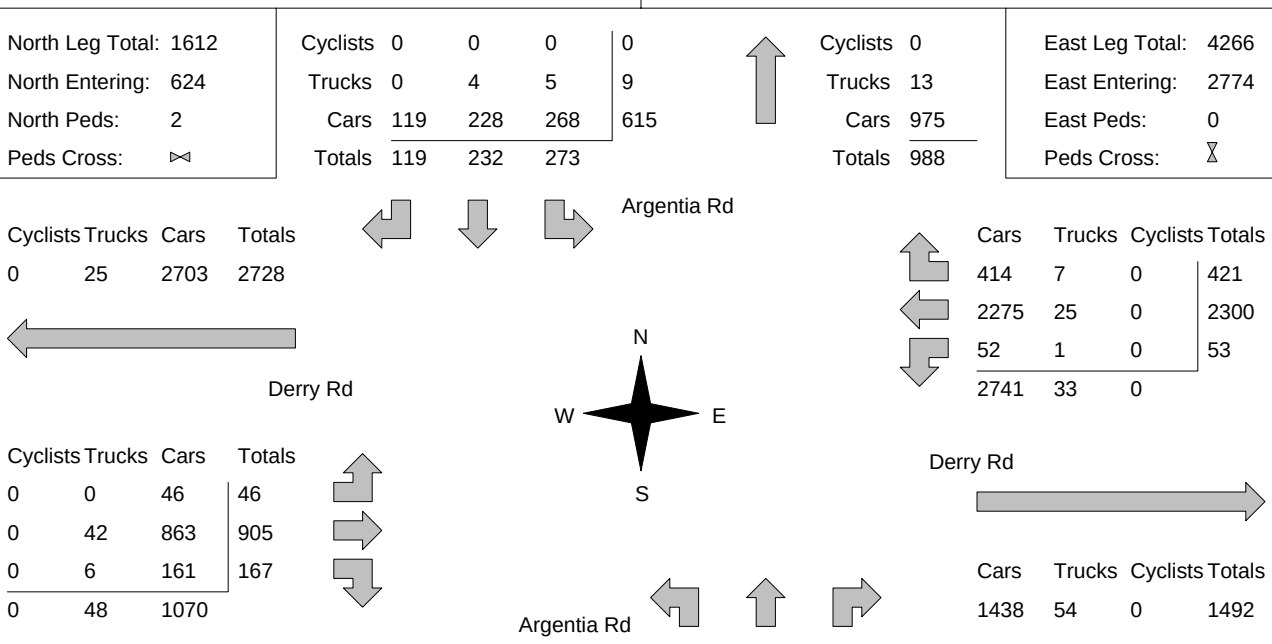
Municipality: Peel
Site #: 0000518131
Intersection: Derry Rd & Argentia Rd
TFR File #: 1
Count date: 15-Feb-11

Weather conditions:
Clear

Person(s) who counted:
Grigory Naftolin
Anna Naftolin

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Total Count Diagram

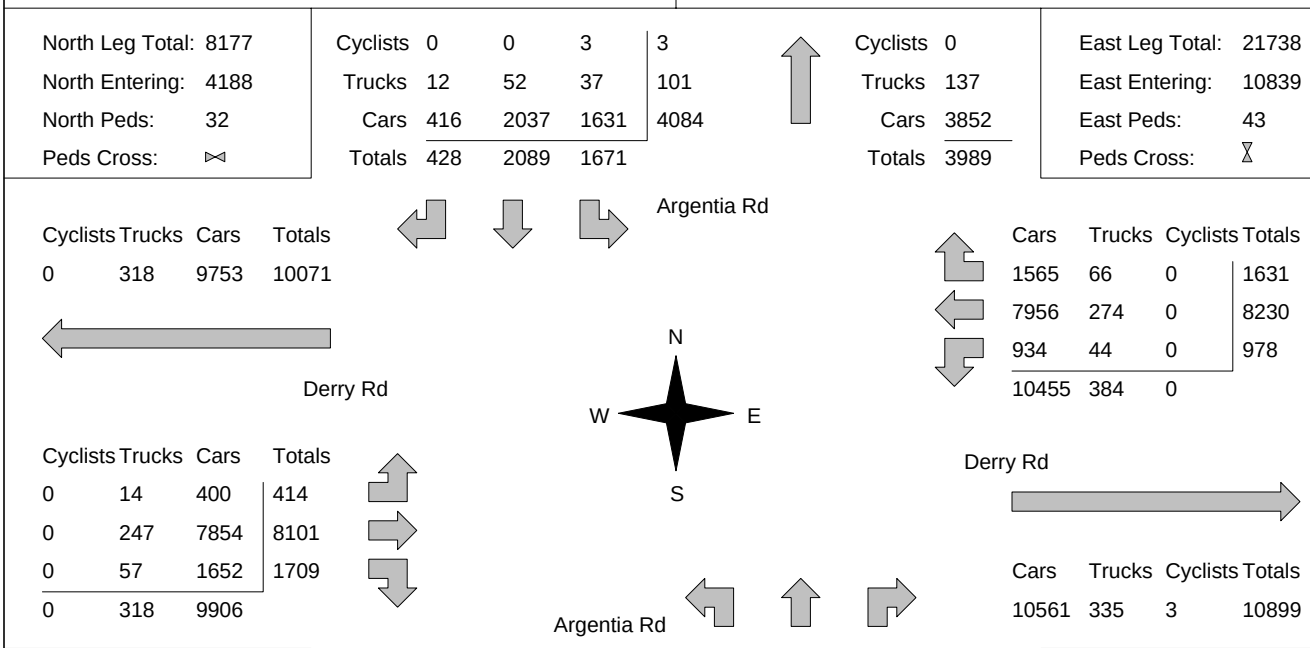
Municipality: Peel
Site #: 0000518131
Intersection: Derry Rd & Argentia Rd
TFR File #: 1
Count date: 15-Feb-11

Weather conditions:
Clear

Person(s) who counted:
Grigory Naftolin
Anna Naftolin

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Derry Rd & Argentia Rd | **Count Date:** 15-Feb-11 | **Municipality:** Peel

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	7	10	2	19	0	21
8:00:00	338	411	19	768	5	951
9:00:00	325	481	43	849	13	1170
11:00:00	2	5	0	7	0	34
12:00:00	121	138	35	294	0	698
13:00:00	134	224	61	419	5	960
14:00:00	150	234	50	434	2	837
15:00:00	2	4	0	6	0	30
16:00:00	117	136	37	290	3	801
17:00:00	165	184	62	411	4	1376
18:00:00	310	262	119	691	0	1794
Totals:	1671	2089	428	4188	32	8672

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	1	1	2	0
8:00:00	39	68	76	183	0
9:00:00	72	139	110	321	0
11:00:00	14	7	6	27	0
12:00:00	130	193	81	404	0
13:00:00	170	282	89	541	0
14:00:00	117	201	85	403	0
15:00:00	10	12	2	24	0
16:00:00	185	189	137	511	2
17:00:00	378	319	268	965	10
18:00:00	298	533	272	1103	4
Totals:	1413	1944	1127	4484	16

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	5	11	1	17	0	55
8:00:00	209	590	151	950	0	3464
9:00:00	261	678	216	1155	12	3882
11:00:00	13	29	11	53	0	74
12:00:00	66	392	113	571	6	1207
13:00:00	101	543	175	819	3	1511
14:00:00	86	496	109	691	0	1515
15:00:00	3	63	2	68	0	85
16:00:00	89	1187	156	1432	11	2174
17:00:00	84	2045	282	2411	8	3322
18:00:00	61	2196	415	2672	3	3774
Totals:	978	8230	1631	10839	43	21063

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	34	4	38	0
8:00:00	55	2101	358	2514	0
9:00:00	55	2201	471	2727	0
11:00:00	7	10	4	21	0
12:00:00	27	498	111	636	0
13:00:00	61	482	149	692	0
14:00:00	52	583	189	824	2
15:00:00	0	14	3	17	0
16:00:00	60	563	119	742	4
17:00:00	52	704	155	911	7
18:00:00	45	911	146	1102	0
Totals:	414	8101	1709	10224	13

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	788	890	450	589	503	506	877	1144

Ontario Traffic Inc.

Count Date: 15-Feb-11 Site #: 0000518131

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	7	7	10	10	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	55	48	85	75	7	5	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:30:00	149	94	183	98	11	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0
7:45:00	247	98	281	98	11	0	1	1	2	1	0	0	0	0	0	0	0	0	2	2
8:00:00	343	96	416	135	21	10	2	1	5	3	0	0	0	0	0	0	0	0	5	3
8:15:00	416	73	543	127	37	16	2	0	5	0	0	0	0	0	0	0	0	0	5	0
8:30:00	499	83	655	112	45	8	3	1	7	2	0	0	0	0	0	0	0	0	13	8
8:45:00	593	94	793	138	55	10	6	3	7	0	1	1	0	0	0	0	0	0	13	0
9:00:00	664	71	894	101	63	8	6	0	8	1	1	0	0	0	0	0	0	0	18	5
9:02:17	664	0	894	0	63	0	6	0	8	0	1	0	0	0	0	0	0	0	18	0
11:00:00	666	2	898	4	63	0	6	0	9	1	1	0	0	0	0	0	0	0	18	0
11:15:00	715	49	914	16	67	4	9	3	10	1	4	3	0	0	0	0	0	0	18	0
11:30:00	741	26	939	25	77	10	9	0	11	1	5	1	0	0	0	0	0	0	18	0
11:45:00	762	21	979	40	82	5	11	2	12	1	6	1	0	0	0	0	0	0	18	0
12:00:00	781	19	1031	52	93	11	12	1	14	2	6	0	0	0	0	0	0	0	18	0
12:15:00	812	31	1076	45	112	19	13	1	18	4	6	0	0	0	0	0	0	0	18	0
12:30:00	832	20	1119	43	127	15	15	2	19	1	6	0	0	0	0	0	0	0	21	3
12:45:00	863	31	1171	52	142	15	17	2	27	8	9	3	3	3	0	0	0	0	23	2
13:00:00	907	44	1241	70	150	8	17	0	28	1	10	1	3	0	0	0	0	0	23	0
13:15:00	951	44	1302	61	158	8	18	1	28	0	10	0	3	0	0	0	0	0	25	2
13:30:00	984	33	1361	59	170	12	20	2	29	1	11	1	3	0	0	0	0	0	25	0
13:45:00	1022	38	1418	57	186	16	20	0	32	3	11	0	3	0	0	0	0	0	25	0
14:00:00	1053	31	1470	52	199	13	21	1	33	1	11	0	3	0	0	0	0	0	25	0
14:02:12	1053	0	1470	0	199	0	21	0	33	0	11	0	3	0	0	0	0	0	25	0
15:00:00	1055	2	1473	3	199	0	21	0	34	1	11	0	3	0	0	0	0	0	25	0
15:15:00	1076	21	1509	36	207	8	23	2	35	1	11	0	3	0	0	0	0	0	25	0
15:30:00	1097	21	1545	36	218	11	23	0	38	3	11	0	3	0	0	0	0	0	28	3
15:45:00	1139	42	1572	27	227	9	24	1	41	3	11	0	3	0	0	0	0	0	28	0
16:00:00	1167	28	1601	29	236	9	26	2	42	1	11	0	3	0	0	0	0	0	28	0
16:15:00	1208	41	1660	59	247	11	26	0	43	1	11	0	3	0	0	0	0	0	28	0
16:30:00	1243	35	1693	33	264	17	30	4	44	1	12	1	3	0	0	0	0	0	28	0
16:45:00	1296	53	1743	50	278	14	30	0	44	0	12	0	3	0	0	0	0	0	30	2
17:00:00	1326	30	1782	39	297	19	32	2	45	1	12	0	3	0	0	0	0	0	32	2
17:15:00	1418	92	1864	82	342	45	33	1	47	2	12	0	3	0	0	0	0	0	32	0
17:30:00	1498	80	1927	63	373	31	35	2	48	1	12	0	3	0	0	0	0	0	32	0
17:45:00	1564	66	1971	44	397	24	35	0	48	0	12	0	3	0	0	0	0	0	32	0
18:00:00	1631	67	2037	66	416	19	37	2	52	4	12	0	3	0	0	0	0	0	32	0
18:15:00	1631	0	2037	0	416	0	37	0	52	0	12	0	3	0	0	0	0	0	32	0
18:15:37	1631	0	2037	0	416	0	37	0	52	0	12	0	3	0	0	0	0	0	32	0

Ontario Traffic Inc.

Count Date: 15-Feb-11 Site #: 0000518131

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	5	5	9	9	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0
7:15:00	33	28	128	119	15	14	1	1	10	8	0	0	0	0	0	0	0	0	0	0
7:30:00	77	44	270	142	49	34	1	0	19	9	2	2	0	0	0	0	0	0	0	0
7:45:00	143	66	422	152	95	46	2	1	26	7	2	0	0	0	0	0	0	0	0	0
8:00:00	211	68	556	134	147	52	3	1	45	19	5	3	0	0	0	0	0	0	0	0
8:15:00	268	57	748	192	194	47	5	2	63	18	8	3	0	0	0	0	0	0	0	0
8:30:00	330	62	882	134	247	53	8	3	81	18	14	6	0	0	0	0	0	0	7	7
8:45:00	403	73	1028	146	297	50	13	5	90	9	17	3	0	0	0	0	0	0	7	0
9:00:00	459	56	1181	153	348	51	16	3	98	8	20	3	0	0	0	0	0	0	12	5
9:02:17	469	10	1196	15	356	8	16	0	98	0	21	1	0	0	0	0	0	0	12	0
11:00:00	472	3	1207	11	358	2	16	0	101	3	21	0	0	0	0	0	0	0	12	0
11:15:00	481	9	1270	63	391	33	17	1	107	6	22	1	0	0	0	0	0	0	12	0
11:30:00	493	12	1355	85	410	19	19	2	116	9	25	3	0	0	0	0	0	0	18	6
11:45:00	503	10	1444	89	438	28	19	0	121	5	27	2	0	0	0	0	0	0	18	0
12:00:00	533	30	1574	130	464	26	21	2	126	5	28	1	0	0	0	0	0	0	18	0
12:15:00	549	16	1740	166	505	41	26	5	132	6	29	1	0	0	0	0	0	0	18	0
12:30:00	572	23	1856	116	539	34	26	0	137	5	35	6	0	0	0	0	0	0	18	0
12:45:00	600	28	1970	114	595	56	28	2	143	6	36	1	0	0	0	0	0	0	21	3
13:00:00	625	25	2095	125	631	36	30	2	148	5	36	0	0	0	0	0	0	0	21	0
13:15:00	647	22	2223	128	660	29	30	0	154	6	36	0	0	0	0	0	0	0	21	0
13:30:00	667	20	2358	135	690	30	31	1	162	8	36	0	0	0	0	0	0	0	21	0
13:45:00	689	22	2441	83	715	25	31	0	164	2	37	1	0	0	0	0	0	0	21	0
14:00:00	709	20	2565	124	738	23	32	1	174	10	38	1	0	0	0	0	0	0	21	0
14:02:12	710	1	2584	19	740	2	32	0	176	2	38	0	0	0	0	0	0	0	21	0
15:00:00	712	2	2626	42	740	0	32	0	176	0	38	0	0	0	0	0	0	0	21	0
15:15:00	735	23	2846	220	764	24	32	0	188	12	42	4	0	0	0	0	0	0	21	0
15:30:00	757	22	3120	274	795	31	34	2	191	3	44	2	0	0	0	0	0	0	24	3
15:45:00	767	10	3416	296	841	46	36	2	202	11	46	2	0	0	0	0	0	0	32	8
16:00:00	796	29	3772	356	885	44	37	1	217	15	49	3	0	0	0	0	0	0	32	0
16:15:00	816	20	4162	390	922	37	39	2	221	4	54	5	0	0	0	0	0	0	36	4
16:30:00	842	26	4707	545	978	56	41	2	230	9	54	0	0	0	0	0	0	0	40	4
16:45:00	856	14	5178	471	1068	90	42	1	235	5	56	2	0	0	0	0	0	0	40	0
17:00:00	875	19	5791	613	1160	92	42	0	243	8	56	0	0	0	0	0	0	0	40	0
17:15:00	887	12	6391	600	1271	111	42	0	249	6	57	1	0	0	0	0	0	0	40	0
17:30:00	901	14	6921	530	1375	104	42	0	256	7	63	6	0	0	0	0	0	0	40	0
17:45:00	908	7	7453	532	1482	107	43	1	260	4	63	0	0	0	0	0	0	0	40	0
18:00:00	934	26	7956	503	1565	83	44	1	274	14	66	3	0	0	0	0	0	0	43	3
18:15:00	934	0	7956	0	1565	0	44	0	274	0	66	0	0	0	0	0	0	0	43	0
18:15:37	934	0	7956	0	1565	0	44	0	274	0	66	0	0	0	0	0	0	0	43	0

Ontario Traffic Inc.

Count Date: 15-Feb-11 Site #: 0000518131

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	11	11	12	11	19	18	0	0	0	0	1	1	0	0	0	0	0	0	0	0
7:30:00	17	6	29	17	38	19	0	0	2	2	2	1	0	0	0	0	0	0	0	0
7:45:00	29	12	39	10	52	14	2	2	2	0	3	1	0	0	0	0	0	0	0	0
8:00:00	36	7	67	28	74	22	3	1	2	0	3	0	0	0	0	0	0	0	0	0
8:15:00	57	21	100	33	108	34	3	0	3	1	5	2	0	0	0	0	0	0	0	0
8:30:00	67	10	132	32	128	20	4	1	4	1	6	1	0	0	0	0	0	0	0	0
8:45:00	83	16	166	34	157	29	4	0	5	1	6	0	0	0	0	0	0	0	0	0
9:00:00	107	24	200	34	178	21	4	0	8	3	9	3	0	0	0	0	0	0	0	0
9:02:17	114	7	203	3	182	4	4	0	9	1	10	1	0	0	0	0	0	0	0	0
11:00:00	121	7	206	3	183	1	4	0	9	0	10	0	0	0	0	0	0	0	0	0
11:15:00	139	18	249	43	200	17	5	1	12	3	11	1	0	0	0	0	0	0	0	0
11:30:00	169	30	283	34	209	9	8	3	14	2	14	3	0	0	0	0	0	0	0	0
11:45:00	196	27	318	35	226	17	11	3	19	5	18	4	0	0	0	0	0	0	0	0
12:00:00	242	46	387	69	254	28	13	2	21	2	20	2	0	0	0	0	0	0	0	0
12:15:00	307	65	481	94	285	31	20	7	22	1	20	0	0	0	0	0	0	0	0	0
12:30:00	348	41	531	50	305	20	21	1	25	3	23	3	0	0	0	0	0	0	0	0
12:45:00	380	32	612	81	323	18	21	0	25	0	23	0	0	0	0	0	0	0	0	0
13:00:00	404	24	665	53	339	16	21	0	25	0	24	1	0	0	0	0	0	0	0	0
13:15:00	441	37	717	52	362	23	22	1	26	1	26	2	0	0	0	0	0	0	0	0
13:30:00	467	26	770	53	380	18	23	1	27	1	27	1	0	0	0	0	0	0	0	0
13:45:00	485	18	816	46	400	20	24	1	29	2	30	3	0	0	0	0	0	0	0	0
14:00:00	518	33	859	43	418	18	24	0	32	3	30	0	0	0	0	0	0	0	0	0
14:02:12	524	6	862	3	419	1	24	0	33	1	30	0	0	0	0	0	0	0	0	0
15:00:00	528	4	870	8	420	1	24	0	33	0	30	0	0	0	0	0	0	0	0	0
15:15:00	567	39	898	28	441	21	26	2	33	0	35	5	0	0	0	0	0	0	2	2
15:30:00	608	41	941	43	465	24	27	1	37	4	36	1	0	0	0	0	0	0	2	0
15:45:00	657	49	985	44	520	55	28	1	44	7	38	2	0	0	0	0	0	0	2	0
16:00:00	708	51	1046	61	548	28	29	1	46	2	39	1	0	0	0	0	0	0	2	0
16:15:00	788	80	1103	57	615	67	30	1	48	2	39	0	0	0	0	0	0	0	4	2
16:30:00	862	74	1182	79	661	46	30	0	49	1	41	2	0	0	0	0	0	0	4	0
16:45:00	992	130	1282	100	742	81	31	1	51	2	44	3	0	0	0	0	0	0	8	4
17:00:00	1084	92	1360	78	810	68	31	0	51	0	45	1	0	0	0	0	0	0	12	4
17:15:00	1145	61	1539	179	911	101	31	0	53	2	48	3	0	0	0	0	0	0	16	4
17:30:00	1227	82	1719	180	989	78	31	0	56	3	50	2	0	0	0	0	0	0	16	0
17:45:00	1301	74	1797	78	1049	60	31	0	57	1	51	1	0	0	0	0	0	0	16	0
18:00:00	1381	80	1887	90	1076	27	32	1	57	0	51	0	0	0	0	0	0	0	16	0
18:15:00	1381	0	1887	0	1076	0	32	0	57	0	51	0	0	0	0	0	0	0	16	0
18:15:37	1381	0	1887	0	1076	0	32	0	57	0	51	0	0	0	0	0	0	0	16	0

Ontario Traffic Inc.

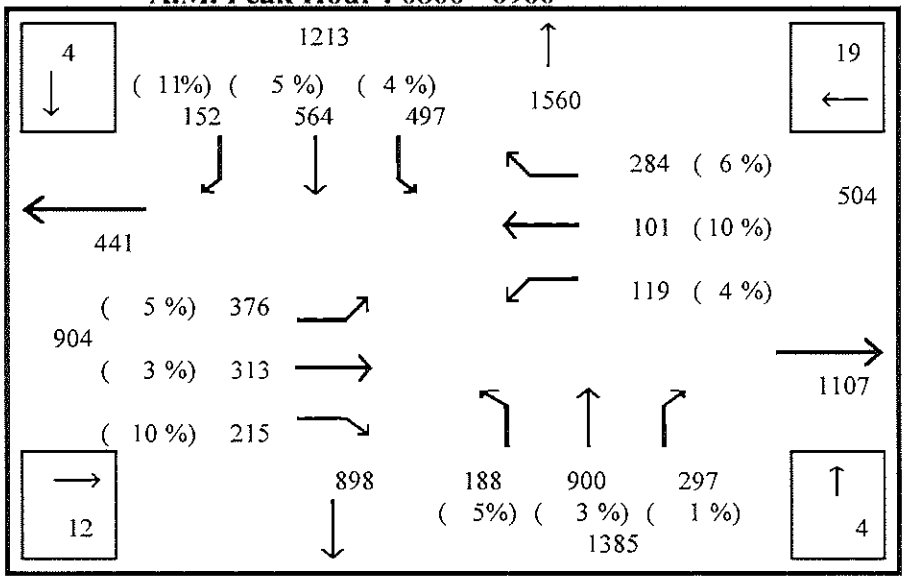
Count Date: 15-Feb-11 Site #: 0000518131

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	34	34	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	31	31	508	474	71	67	0	0	8	8	0	0	0	0	0	0	0	0	0	0
7:30:00	40	9	1019	511	172	101	0	0	13	5	1	1	0	0	0	0	0	0	0	0
7:45:00	40	0	1572	553	247	75	0	0	24	11	2	1	0	0	0	0	0	0	0	0
8:00:00	54	14	2094	522	359	112	1	1	41	17	3	1	0	0	0	0	0	0	0	0
8:15:00	60	6	2564	470	460	101	1	0	46	5	3	0	0	0	0	0	0	0	0	0
8:30:00	79	19	3165	601	568	108	3	2	52	6	6	3	0	0	0	0	0	0	0	0
8:45:00	94	15	3693	528	700	132	4	1	62	10	8	2	0	0	0	0	0	0	0	0
9:00:00	105	11	4265	572	823	123	5	1	71	9	10	2	0	0	0	0	0	0	0	0
9:02:17	105	0	4265	0	823	0	5	0	71	0	10	0	0	0	0	0	0	0	0	0
11:00:00	111	6	4274	9	827	4	6	1	72	1	10	0	0	0	0	0	0	0	0	0
11:15:00	113	2	4395	121	850	23	7	1	76	4	14	4	0	0	0	0	0	0	0	0
11:30:00	122	9	4493	98	873	23	7	0	78	2	16	2	0	0	0	0	0	0	0	0
11:45:00	126	4	4615	122	888	15	7	0	86	8	24	8	0	0	0	0	0	0	0	0
12:00:00	137	11	4756	141	919	31	7	0	88	2	29	5	0	0	0	0	0	0	0	0
12:15:00	150	13	4862	106	945	26	7	0	94	6	29	0	0	0	0	0	0	0	0	0
12:30:00	167	17	4960	98	975	30	8	1	97	3	30	1	0	0	0	0	0	0	0	0
12:45:00	183	16	5086	126	1018	43	8	0	105	8	30	0	0	0	0	0	0	0	0	0
13:00:00	196	13	5215	129	1067	49	9	1	111	6	30	0	0	0	0	0	0	0	0	0
13:15:00	212	16	5352	137	1121	54	9	0	117	6	32	2	0	0	0	0	0	0	2	2
13:30:00	222	10	5506	154	1177	56	9	0	121	4	33	1	0	0	0	0	0	0	2	0
13:45:00	239	17	5655	149	1222	45	9	0	124	3	36	3	0	0	0	0	0	0	2	0
14:00:00	247	8	5776	121	1249	27	10	1	133	9	37	1	0	0	0	0	0	0	2	0
14:02:12	247	0	5776	0	1249	0	10	0	133	0	37	0	0	0	0	0	0	0	2	0
15:00:00	247	0	5790	14	1251	2	10	0	133	0	38	1	0	0	0	0	0	0	2	0
15:15:00	262	15	5899	109	1289	38	11	1	148	15	40	2	0	0	0	0	0	0	2	0
15:30:00	270	8	6027	128	1311	22	11	0	154	6	43	3	0	0	0	0	0	0	6	4
15:45:00	284	14	6193	166	1338	27	12	1	161	7	44	1	0	0	0	0	0	0	6	0
16:00:00	304	20	6317	124	1361	23	13	1	169	8	47	3	0	0	0	0	0	0	6	0
16:15:00	317	13	6483	166	1387	26	14	1	183	14	48	1	0	0	0	0	0	0	9	3
16:30:00	332	15	6638	155	1424	37	14	0	190	7	51	3	0	0	0	0	0	0	9	0
16:45:00	349	17	6817	179	1465	41	14	0	198	8	51	0	0	0	0	0	0	0	13	4
17:00:00	355	6	6980	163	1511	46	14	0	210	12	52	1	0	0	0	0	0	0	13	0
17:15:00	368	13	7165	185	1550	39	14	0	214	4	52	0	0	0	0	0	0	0	13	0
17:30:00	384	16	7410	245	1577	27	14	0	227	13	56	4	0	0	0	0	0	0	13	0
17:45:00	395	11	7680	270	1626	49	14	0	240	13	57	1	0	0	0	0	0	0	13	0
18:00:00	400	5	7854	174	1652	26	14	0	247	7	57	0	0	0	0	0	0	0	13	0
18:15:00	400	0	7854	0	1652	0	14	0	247	0	57	0	0	0	0	0	0	0	13	0
18:15:37	400	0	7854	0	1652	0	14	0	247	0	57	0	0	0	0	0	0	0	13	0

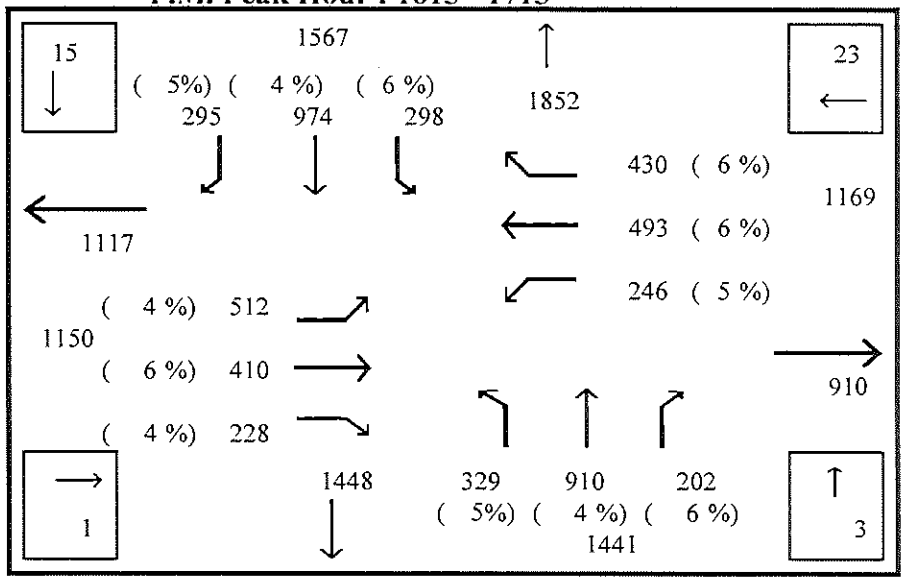
Count Date : Tuesday June 26 2012 9/9/2013

[ARG-WIN-01-S] ARGENTIA RD/WINSTON CHURCHILL BLVD

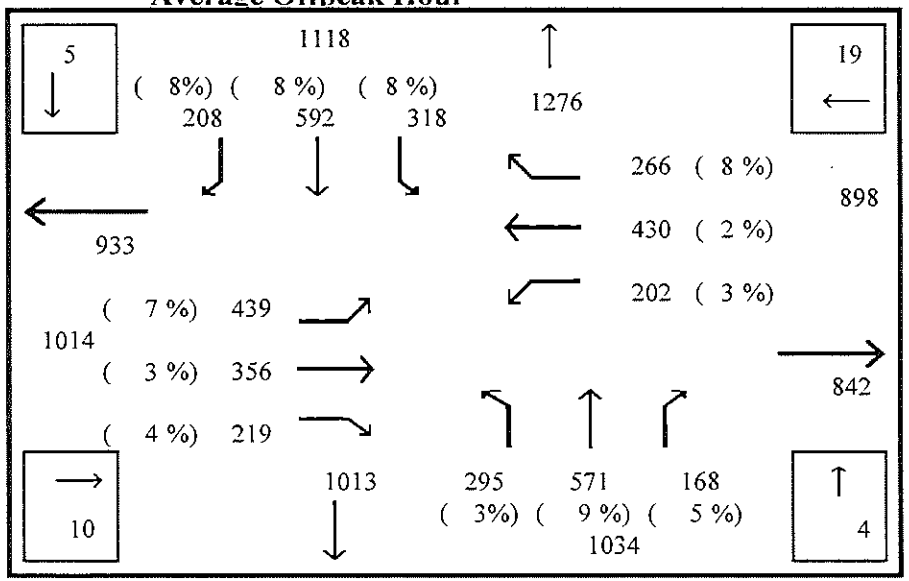
A.M. Peak Hour : 0800 - 0900



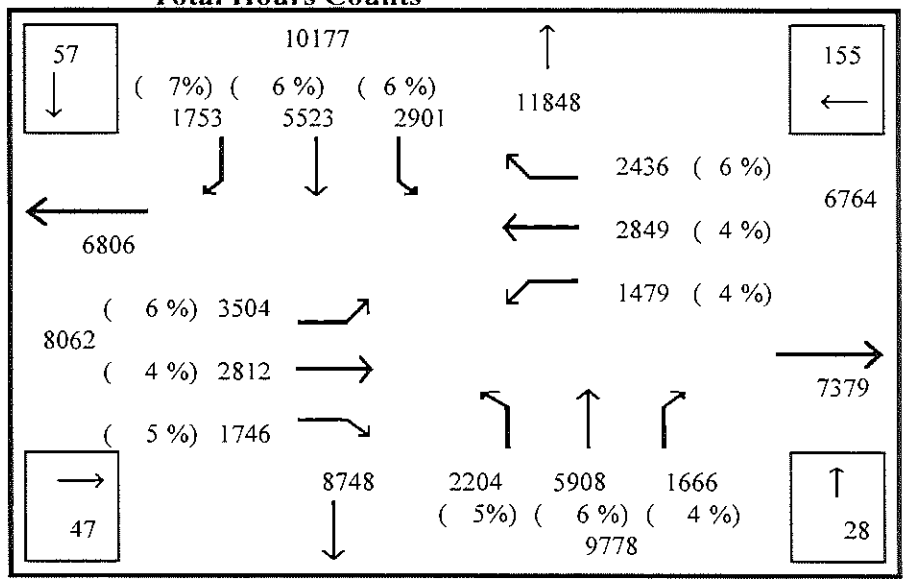
P.M. Peak Hour : 1615 - 1715



Average Offpeak Hour



Total Hours Counts



Note: North is at the top of the page

Value in (parenthesis) indicates truck/heavy vehicle percentages

Intersection count: 15-minute interval data

ARGENTIA RD/WINSTON CHURCHILL BLVD ARG-WIN-01-S ZArea: Z54W

Counted On: 2012/06/26 Traffic Control: Signal Report Date: 2013/09/09

Time Ending	E - East					N - North					S - South					W - West					All Vehicles
	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	
715	38	38	22	6	0	20	135	41	6	0	100	135	21	13	0	10	18	18	1	0	622
730	79	53	57	7	0	30	179	47	7	0	164	149	47	18	0	11	12	36	0	0	896
745	78	68	42	5	0	19	229	77	9	0	106	132	43	16	1	23	16	60	4	0	927
800	82	76	47	17	2	23	218	33	20	0	117	151	44	21	0	26	19	55	9	0	958
815	90	64	46	6	2	32	237	82	12	6	95	119	36	16	6	10	15	59	4	0	923
830	94	82	54	14	0	30	221	77	12	0	119	136	29	16	4	40	32	77	8	0	1041
845	86	81	49	11	0	61	210	69	3	2	146	130	34	15	0	28	19	68	4	2	1014
900	87	77	44	19	2	56	204	65	14	4	119	148	37	18	9	36	25	64	15	2	1028
Total	634	539	361	85	6	271	1633	491	83	12	966	1100	291	133	20	184	156	437	45	4	

AM Peak	E - East					N - North					S - South					W - West					All Vehicles
815 - 900	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	
Total	357	304	193	50	4	179	872	293	41	12	479	533	136	65	19	114	91	268	31	4	0

Offpeak	E - East					N - North					S - South					W - West					All Vehicles
	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	
1115	74	51	39	9	2	55	103	33	16	1	55	84	46	17	3	48	61	35	4	2	730
1130	73	54	36	16	5	45	119	38	18	0	58	95	44	24	8	47	65	42	12	0	786
1145	70	56	55	10	0	52	98	52	4	0	68	173	43	45	0	49	83	60	12	0	930
1200	83	60	42	15	1	72	118	29	18	6	99	133	52	30	4	38	92	53	6	6	940
1215	90	67	48	18	0	79	125	45	23	0	92	134	61	26	2	43	128	55	13	0	1047
1230	108	93	104	10	1	103	147	53	21	8	98	127	78	24	8	84	180	80	4	0	1314
1245	164	141	61	9	0	73	137	42	15	8	61	143	53	19	7	64	144	83	4	1	1213
1300	134	145	43	11	0	76	131	43	21	0	71	148	50	28	5	43	139	71	10	4	1164
1315	117	102	39	11	5	59	136	44	19	0	65	166	35	14	7	46	102	54	16	0	1025
1330	119	90	61	4	0	94	159	21	21	4	69	143	41	12	7	40	95	79	6	0	1054

Intersection count: 15-minute interval data

ARGENTIA RD/WINSTON CHURCHILL BLVD ARG-WIN-01-S ZArea: Z54W

Counted On: 2012/06/26 Traffic Control: Signal Report Date: 2013/09/09

1345	109	87	55	14	3	72	152	37	21	3	74	135	37	21	7	45	92	73	15	0	1039
1400	92	91	52	15	0	77	134	41	15	0	66	145	39	17	0	41	85	48	10	0	968
Offpeak Total	1233	1037	635	142	17	857	1559	478	212	30	876	1626	579	277	58	588	1266	733	112	13	
Offpeak Hr Avg	411	346	212	47	6	286	520	159	71	10	292	542	193	92	19	196	422	244	37	4	

PM	E - East					N - North					S - South					W - West					All Vehicles
	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	
1515	117	92	52	15	4	88	157	53	20	3	74	151	50	37	10	48	99	67	23	0	1143
1530	123	97	48	18	6	77	165	54	31	0	83	117	62	27	9	55	107	87	17	0	1168
1545	138	109	56	19	0	85	175	48	26	0	67	188	73	20	11	53	138	93	18	0	1306
1600	118	87	55	13	4	86	167	57	23	1	82	188	51	23	9	49	97	77	13	0	1186
1615	122	84	62	19	3	85	219	53	13	0	84	194	63	19	6	58	121	96	6	0	1298
1630	120	84	54	17	2	75	228	53	23	0	86	236	74	24	6	56	105	107	14	3	1356
1645	122	97	52	10	0	77	192	48	11	0	104	234	75	23	2	53	123	84	17	0	1322
1700	112	121	49	17	6	94	204	42	14	1	40	194	54	8	10	62	109	95	18	0	1233
1715	135	82	65	13	7	68	248	47	17	0	50	268	76	21	5	62	124	118	22	0	1416
1730	117	94	64	13	2	81	227	67	15	0	67	249	72	15	4	57	103	105	12	3	1358
1745	116	95	66	9	0	75	198	49	10	0	76	232	52	18	2	49	108	98	9	3	1260
1800	96	75	45	12	0	81	198	54	16	0	64	192	58	14	3	42	82	84	3	2	1116
Total	1436	1117	668	175	34	972	2378	625	219	5	877	2443	760	249	77	644	1316	1111	172	11	

PM Peak	E - East					N - North					S - South					W - West					All Vehicles
1630 - 1715	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	LT	Thru	RT	Trk	Peds	
Total	489	384	220	57	15	314	872	190	65	1	280	932	279	76	23	233	461	404	71	3	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

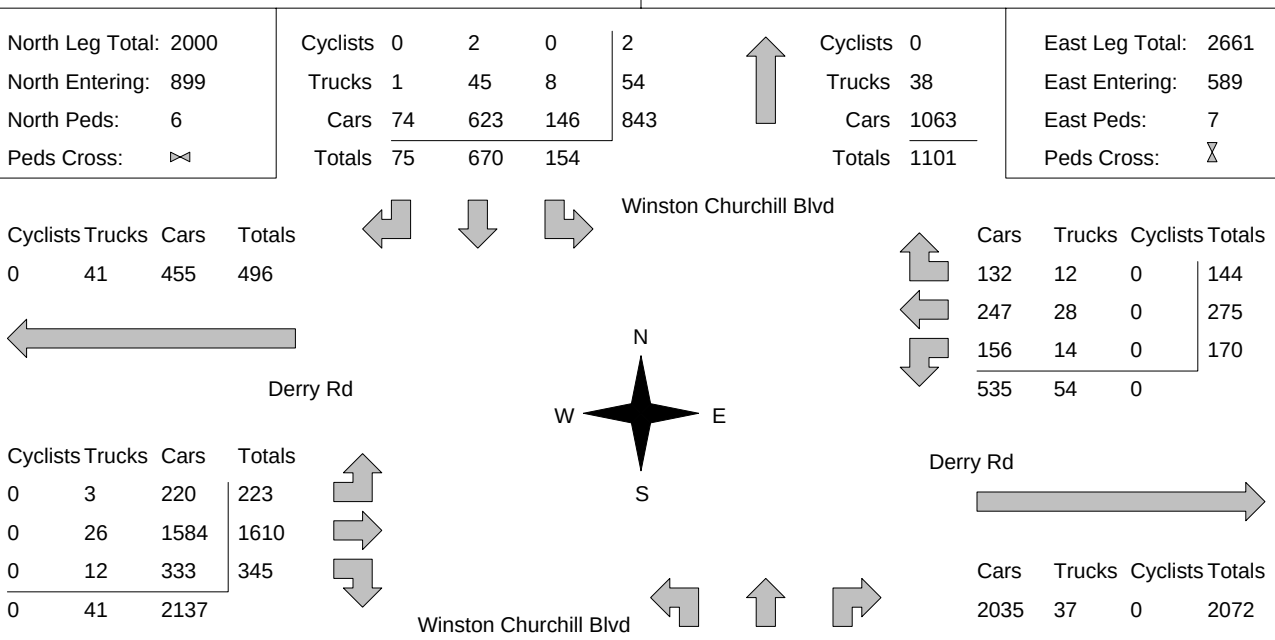
Municipality: Peel
Site #: 0000520006
Intersection: Derry Rd & Winston Churchill Blvd
TFR File #: 1
Count date: 1-Mar-11

Weather conditions:
Sunny

Person(s) who counted:
Iory Mezentsev
Tatiana Mezentseva

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 13:00:00
To: 14:00:00

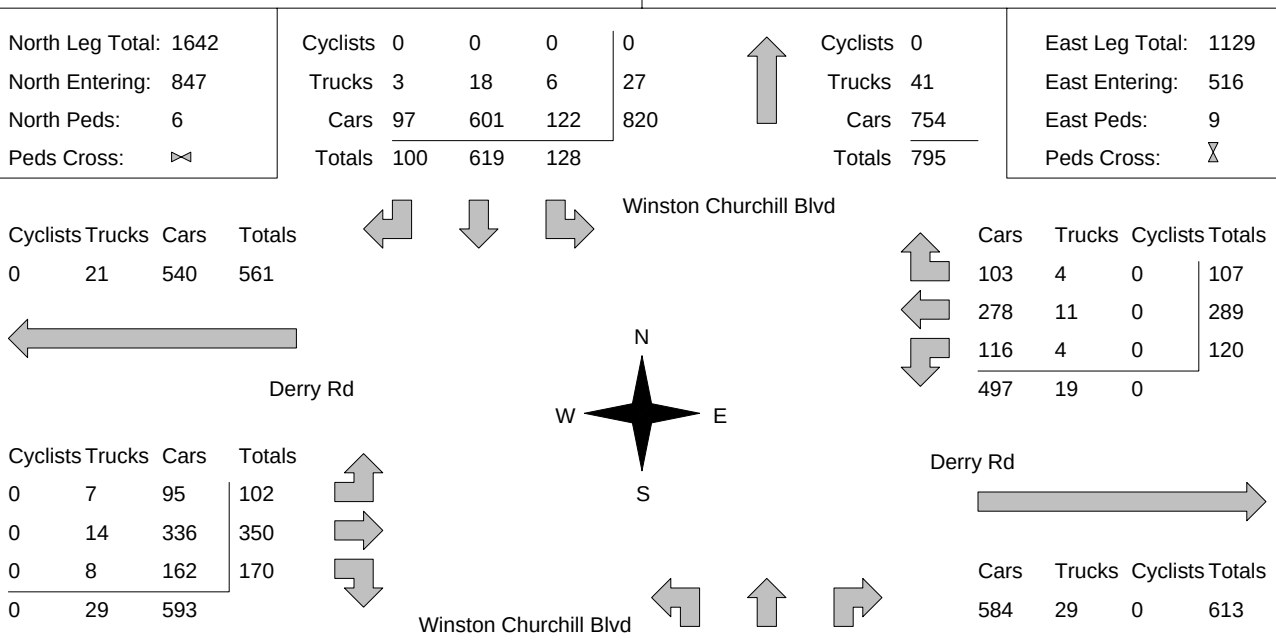
Municipality: Peel
Site #: 0000520006
Intersection: Derry Rd & Winston Churchill Blvd
TFR File #: 1
Count date: 1-Mar-11

Weather conditions:
Sunny

Person(s) who counted:
Iory Mezentsev
Tatiana Mezentseva

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 17:00:00
To: 18:00:00

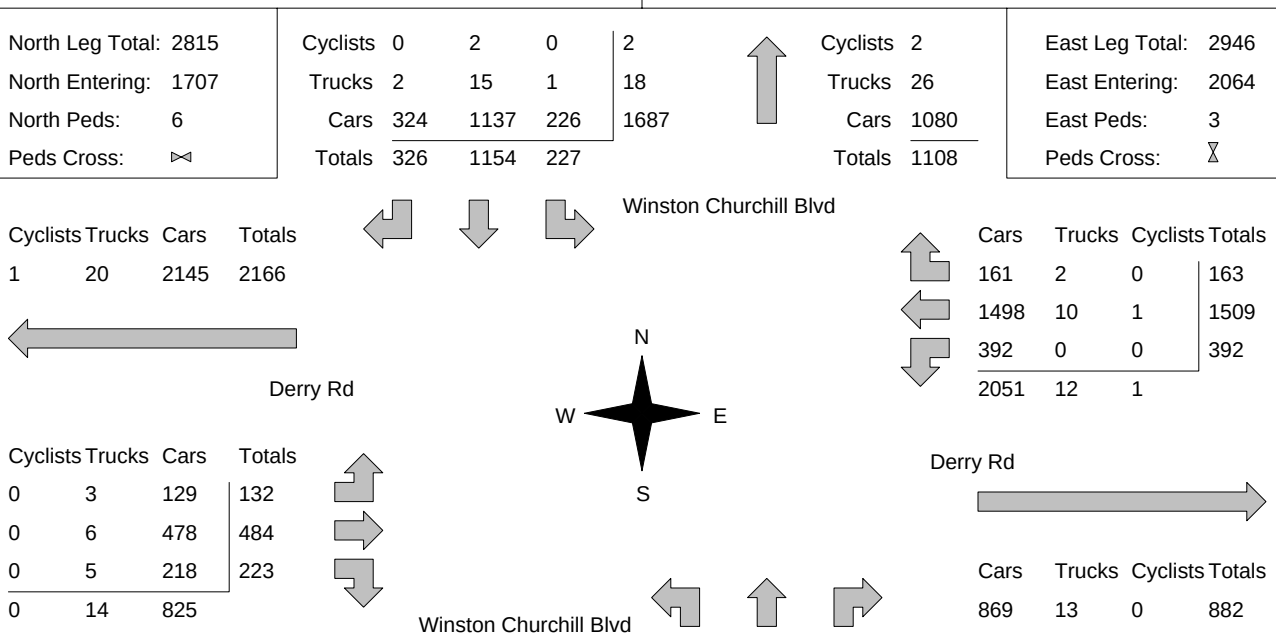
Municipality: Peel
Site #: 0000520006
Intersection: Derry Rd & Winston Churchill Blvd
TFR File #: 1
Count date: 1-Mar-11

Weather conditions:
Sunny

Person(s) who counted:
Iory Mezentsev
Tatiana Mezentseva

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Ontario Traffic Inc.

Total Count Diagram

Municipality: Peel
Site #: 0000520006
Intersection: Derry Rd & Winston Churchill Blvd
TFR File #: 1
Count date: 1-Mar-11

Weather conditions:
Sunny

Person(s) who counted:
Iory Mezentsev
Tatiana Mezentseva

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E

North Leg Total:	15064
North Entering:	7918
North Peds:	77
Peds Cross:	⋈

Cyclists	0	7	0	7
Trucks	42	210	42	294
Cars	1143	5391	1083	7617
Totals	1185	5608	1125	

Cyclists	4
Trucks	313
Cars	6829
Totals	7146

East Leg Total:	15692
East Entering:	7832
East Peds:	62
Peds Cross:	⧖

Winston Churchill Blvd

Cyclists	Trucks	Cars	Totals
2	243	7854	8099

Cars	Trucks	Cyclists	Totals
1015	50	0	1065
5066	126	2	5194
1530	43	0	1573
7611	219	2	

Derry Rd

N
W E
S

Cyclists	Trucks	Cars	Totals
0	38	940	978
0	128	5200	5328
0	83	1669	1752
0	249	7809	

Derry Rd

Cars	Trucks	Cyclists	Totals
7645	215	0	7860

Winston Churchill Blvd

Peds Cross:	⧖
West Peds:	67
West Entering:	8058
West Leg Total:	16157

Cars	8590
Trucks	336
Cyclists	7
Totals	8933

Cars	1645	4874	1362	7881
Trucks	75	225	45	345
Cyclists	0	4	0	4
Totals	1720	5103	1407	

Peds Cross:	⋈
South Peds:	35
South Entering:	8230
South Leg Total:	17163

Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Derry Rd & Winston Churchill Blvd | **Count Date:** 1-Mar-11 | **Municipality:** Peel

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	115	519	113	747	11	1659
9:00:00	147	635	70	852	6	2080
11:00:00	0	0	0	0	0	19
12:00:00	106	522	78	706	3	1473
13:00:00	99	596	109	804	3	1674
14:00:00	128	619	100	847	6	1740
15:00:00	0	3	2	5	0	5
16:00:00	129	714	172	1015	32	2103
17:00:00	174	846	215	1235	10	2373
18:00:00	227	1154	326	1707	6	3022
Totals:	1125	5608	1185	7918	77	16148

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	125	547	240	912	4
9:00:00	154	733	341	1228	1
11:00:00	1	17	1	19	0
12:00:00	155	511	101	767	1
13:00:00	174	578	118	870	4
14:00:00	172	586	135	893	3
15:00:00	0	0	0	0	0
16:00:00	293	633	162	1088	17
17:00:00	315	685	138	1138	4
18:00:00	331	813	171	1315	1
Totals:	1720	5103	1407	8230	35

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	129	250	97	476	7	2485
9:00:00	176	299	144	619	2	2672
11:00:00	0	0	0	0	0	20
12:00:00	78	242	105	425	6	967
13:00:00	109	277	88	474	5	1002
14:00:00	120	289	107	516	9	1138
15:00:00	0	0	1	1	0	1
16:00:00	232	842	156	1230	26	1949
17:00:00	337	1486	204	2027	4	2753
18:00:00	392	1509	163	2064	3	2903
Totals:	1573	5194	1065	7832	62	15890

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	188	1548	273	2009	12
9:00:00	201	1525	327	2053	6
11:00:00	1	17	2	20	0
12:00:00	67	302	173	542	0
13:00:00	84	272	172	528	5
14:00:00	102	350	170	622	6
15:00:00	0	0	0	0	0
16:00:00	97	422	200	719	31
17:00:00	106	408	212	726	2
18:00:00	132	484	223	839	5
Totals:	978	5328	1752	8058	67

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	806	1042	789	879	934	1193	1341	1720

Ontario Traffic Inc.

Count Date: 1-Mar-11 Site #: 0000520006

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	32	32	83	83	21	21	2	2	6	6	9	9	0	0	0	0	0	0	2	2
7:30:00	58	26	217	134	45	24	3	1	16	10	12	3	0	0	0	0	0	0	4	2
7:45:00	80	22	350	133	71	26	5	2	22	6	12	0	0	0	0	0	0	0	8	4
8:00:00	108	28	488	138	101	30	7	2	30	8	12	0	0	0	1	1	0	0	11	3
8:15:00	145	37	659	171	112	11	9	2	47	17	12	0	0	0	2	1	0	0	13	2
8:30:00	184	39	826	167	125	13	12	3	56	9	12	0	0	0	2	0	0	0	14	1
8:45:00	226	42	973	147	145	20	13	1	67	11	13	1	0	0	2	0	0	0	14	0
9:00:00	248	22	1080	107	164	19	14	1	72	5	19	6	0	0	2	0	0	0	17	3
9:00:24	248	0	1080	0	164	0	14	0	72	0	19	0	0	0	2	0	0	0	17	0
11:00:00	248	0	1080	0	164	0	14	0	72	0	19	0	0	0	2	0	0	0	17	0
11:15:00	267	19	1166	86	184	20	14	0	76	4	21	2	0	0	2	0	0	0	18	1
11:30:00	299	32	1296	130	195	11	15	1	88	12	26	5	0	0	3	1	0	0	18	0
11:45:00	314	15	1414	118	211	16	16	1	97	9	27	1	0	0	3	0	0	0	18	0
12:00:00	350	36	1561	147	234	23	18	2	111	14	27	0	0	0	4	1	0	0	20	2
12:15:00	365	15	1689	128	265	31	20	2	120	9	28	1	0	0	4	0	0	0	22	2
12:30:00	397	32	1853	164	288	23	21	1	124	4	28	0	0	0	4	0	0	0	23	1
12:45:00	419	22	2003	150	309	21	21	0	132	8	28	0	0	0	4	0	0	0	23	0
13:00:00	445	26	2131	128	342	33	22	1	137	5	28	0	0	0	4	0	0	0	23	0
13:15:00	479	34	2272	141	354	12	22	0	140	3	29	1	0	0	4	0	0	0	26	3
13:30:00	514	35	2449	177	377	23	23	1	146	6	31	2	0	0	4	0	0	0	26	0
13:45:00	539	25	2578	129	399	22	24	1	149	3	31	0	0	0	4	0	0	0	27	1
14:00:00	567	28	2732	154	439	40	28	4	155	6	31	0	0	0	4	0	0	0	29	2
14:00:15	567	0	2732	0	439	0	28	0	155	0	31	0	0	0	4	0	0	0	29	0
15:00:00	567	0	2735	3	441	2	28	0	155	0	31	0	0	0	4	0	0	0	29	0
15:15:00	598	31	2898	163	482	41	31	3	161	6	31	0	0	0	4	0	0	0	36	7
15:30:00	625	27	3090	192	527	45	31	0	165	4	33	2	0	0	5	1	0	0	53	17
15:45:00	657	32	3234	144	564	37	32	1	170	5	35	2	0	0	5	0	0	0	58	5
16:00:00	690	33	3426	192	607	43	34	2	177	7	37	2	0	0	5	0	0	0	61	3
16:15:00	737	47	3628	202	656	49	35	1	183	6	37	0	0	0	5	0	0	0	62	1
16:30:00	777	40	3830	202	696	40	37	2	186	3	38	1	0	0	5	0	0	0	63	1
16:45:00	815	38	4059	229	755	59	40	3	188	2	38	0	0	0	5	0	0	0	66	3
17:00:00	857	42	4254	195	819	64	41	1	195	7	40	2	0	0	5	0	0	0	71	5
17:15:00	907	50	4547	293	897	78	41	0	197	2	42	2	0	0	7	2	0	0	74	3
17:30:00	974	67	4810	263	990	93	42	1	203	6	42	0	0	0	7	0	0	0	74	0
17:45:00	1036	62	5114	304	1088	98	42	0	207	4	42	0	0	0	7	0	0	0	77	3
18:00:00	1083	47	5391	277	1143	55	42	0	210	3	42	0	0	0	7	0	0	0	77	0
18:15:00	1083	0	5391	0	1143	0	42	0	210	0	42	0	0	0	7	0	0	0	77	0
18:15:26	1083	0	5391	0	1143	0	42	0	210	0	42	0	0	0	7	0	0	0	77	0

Ontario Traffic Inc.

Count Date: 1-Mar-11 Site #: 0000520006

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	27	27	51	51	16	16	4	4	1	1	1	1	0	0	0	0	0	0	0	0
7:30:00	55	28	104	53	31	15	4	0	3	2	3	2	0	0	0	0	0	0	1	1
7:45:00	93	38	166	62	56	25	5	1	9	6	4	1	0	0	0	0	0	0	2	1
8:00:00	119	26	230	64	88	32	10	5	20	11	9	5	0	0	0	0	0	0	7	5
8:15:00	148	29	284	54	120	32	12	2	28	8	13	4	0	0	0	0	0	0	9	2
8:30:00	199	51	357	73	146	26	17	5	31	3	14	1	0	0	0	0	0	0	9	0
8:45:00	249	50	413	56	188	42	19	2	37	6	16	2	0	0	0	0	0	0	9	0
9:00:00	286	37	509	96	222	34	19	0	40	3	19	3	0	0	0	0	0	0	9	0
9:00:24	286	0	509	0	222	0	19	0	40	0	19	0	0	0	0	0	0	0	9	0
11:00:00	286	0	509	0	222	0	19	0	40	0	19	0	0	0	0	0	0	0	9	0
11:15:00	305	19	558	49	241	19	19	0	43	3	20	1	0	0	0	0	0	0	10	1
11:30:00	317	12	614	56	263	22	19	0	47	4	23	3	0	0	0	0	0	0	11	1
11:45:00	337	20	674	60	293	30	20	1	52	5	23	0	0	0	0	0	0	0	13	2
12:00:00	363	26	732	58	321	28	20	0	59	7	25	2	0	0	0	0	0	0	15	2
12:15:00	396	33	794	62	340	19	21	1	61	2	25	0	0	0	0	0	0	0	17	2
12:30:00	418	22	856	62	360	20	24	3	64	3	26	1	0	0	1	1	0	0	18	1
12:45:00	444	26	929	73	382	22	27	3	70	6	26	0	0	0	1	0	0	0	18	0
13:00:00	464	20	997	68	407	25	28	1	70	0	27	1	0	0	1	0	0	0	20	2
13:15:00	497	33	1074	77	441	34	29	1	75	5	28	1	0	0	1	0	0	0	25	5
13:30:00	518	21	1134	60	470	29	30	1	75	0	29	1	0	0	1	0	0	0	27	2
13:45:00	548	30	1203	69	486	16	31	1	81	6	30	1	0	0	1	0	0	0	27	0
14:00:00	580	32	1275	72	510	24	32	1	81	0	31	1	0	0	1	0	0	0	29	2
14:00:15	580	0	1275	0	511	1	32	0	81	0	31	0	0	0	1	0	0	0	29	0
15:00:00	580	0	1275	0	511	0	32	0	81	0	31	0	0	0	1	0	0	0	29	0
15:15:00	627	47	1438	163	539	28	36	4	82	1	31	0	0	0	1	0	0	0	35	6
15:30:00	674	47	1601	163	581	42	38	2	88	6	39	8	0	0	1	0	0	0	45	10
15:45:00	740	66	1851	250	623	42	39	1	95	7	42	3	0	0	1	0	0	0	46	1
16:00:00	804	64	2097	246	655	32	40	1	101	6	43	1	0	0	1	0	0	0	55	9
16:15:00	880	76	2430	333	699	44	43	3	105	4	45	2	0	0	1	0	0	0	55	0
16:30:00	959	79	2778	348	734	35	43	0	110	5	46	1	0	0	1	0	0	0	56	1
16:45:00	1048	89	3176	398	805	71	43	0	113	3	48	2	0	0	1	0	0	0	58	2
17:00:00	1138	90	3568	392	854	49	43	0	116	3	48	0	0	0	1	0	0	0	59	1
17:15:00	1250	112	3926	358	905	51	43	0	119	3	48	0	0	0	1	0	0	0	61	2
17:30:00	1336	86	4363	437	935	30	43	0	120	1	49	1	0	0	1	0	0	0	62	1
17:45:00	1427	91	4694	331	967	32	43	0	122	2	50	1	0	0	2	1	0	0	62	0
18:00:00	1530	103	5066	372	1015	48	43	0	126	4	50	0	0	0	2	0	0	0	62	0
18:15:00	1530	0	5066	0	1015	0	43	0	126	0	50	0	0	0	2	0	0	0	62	0
18:15:26	1530	0	5066	0	1015	0	43	0	126	0	50	0	0	0	2	0	0	0	62	0

Ontario Traffic Inc.

Count Date: 1-Mar-11 Site #: 0000520006

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	22	22	96	96	50	50	4	4	3	3	2	2	0	0	0	0	0	0	0	0
7:30:00	45	23	197	101	100	50	6	2	9	6	3	1	0	0	0	0	0	0	0	0
7:45:00	84	39	346	149	170	70	8	2	14	5	4	1	0	0	0	0	0	0	0	0
8:00:00	113	29	528	182	234	64	12	4	19	5	6	2	0	0	0	0	0	0	4	4
8:15:00	151	38	726	198	321	87	16	4	23	4	6	0	0	0	0	0	0	0	5	1
8:30:00	187	36	900	174	406	85	17	1	34	11	6	0	0	0	0	0	0	0	5	0
8:45:00	218	31	1057	157	475	69	20	3	37	3	7	1	0	0	0	0	0	0	5	0
9:00:00	256	38	1227	170	573	98	23	3	53	16	8	1	0	0	0	0	0	0	5	0
9:00:24	257	1	1229	2	574	1	23	0	53	0	8	0	0	0	0	0	0	0	5	0
11:00:00	257	0	1243	14	574	0	23	0	54	1	8	0	0	0	0	0	0	0	5	0
11:15:00	290	33	1354	111	592	18	23	0	58	4	10	2	0	0	0	0	0	0	5	0
11:30:00	323	33	1482	128	612	20	27	4	66	8	11	1	0	0	0	0	0	0	6	1
11:45:00	365	42	1604	122	642	30	27	0	72	6	13	2	0	0	0	0	0	0	6	0
12:00:00	405	40	1728	124	669	27	30	3	80	8	14	1	0	0	0	0	0	0	6	0
12:15:00	443	38	1855	127	692	23	31	1	87	7	17	3	0	0	0	0	0	0	9	3
12:30:00	481	38	1980	125	712	20	34	3	94	7	17	0	0	0	0	0	0	0	10	1
12:45:00	525	44	2139	159	751	39	37	3	104	10	18	1	0	0	0	0	0	0	10	0
13:00:00	572	47	2269	130	782	31	37	0	117	13	19	1	0	0	0	0	0	0	10	0
13:15:00	617	45	2407	138	815	33	39	2	127	10	20	1	0	0	0	0	0	0	10	0
13:30:00	659	42	2550	143	841	26	40	1	134	7	23	3	0	0	0	0	0	0	11	1
13:45:00	693	34	2683	133	871	30	42	2	142	8	25	2	0	0	0	0	0	0	13	2
14:00:00	737	44	2825	142	908	37	44	2	147	5	28	3	0	0	0	0	0	0	13	0
14:00:15	737	0	2825	0	908	0	44	0	147	0	28	0	0	0	0	0	0	0	13	0
15:00:00	737	0	2825	0	908	0	44	0	147	0	28	0	0	0	0	0	0	0	13	0
15:15:00	798	61	2982	157	949	41	46	2	153	6	33	5	0	0	0	0	0	0	15	2
15:30:00	869	71	3136	154	985	36	54	8	161	8	36	3	0	0	0	0	0	0	24	9
15:45:00	935	66	3273	137	1022	37	57	3	166	5	37	1	0	0	0	0	0	0	28	4
16:00:00	1014	79	3431	158	1061	39	60	3	172	6	37	0	0	0	2	2	0	0	30	2
16:15:00	1091	77	3600	169	1090	29	62	2	184	12	37	0	0	0	2	0	0	0	30	0
16:30:00	1160	69	3771	171	1119	29	65	3	190	6	37	0	0	0	2	0	0	0	32	2
16:45:00	1244	84	3928	157	1155	36	65	0	196	6	37	0	0	0	2	0	0	0	32	0
17:00:00	1322	78	4084	156	1197	42	67	2	204	8	39	2	0	0	2	0	0	0	34	2
17:15:00	1410	88	4300	216	1234	37	69	2	212	8	42	3	0	0	2	0	0	0	35	1
17:30:00	1490	80	4491	191	1276	42	71	2	217	5	43	1	0	0	3	1	0	0	35	0
17:45:00	1579	89	4689	198	1330	54	74	3	219	2	45	2	0	0	4	1	0	0	35	0
18:00:00	1645	66	4874	185	1362	32	75	1	225	6	45	0	0	0	4	0	0	0	35	0
18:15:00	1645	0	4874	0	1362	0	75	0	225	0	45	0	0	0	4	0	0	0	35	0
18:15:26	1645	0	4874	0	1362	0	75	0	225	0	45	0	0	0	4	0	0	0	35	0

Ontario Traffic Inc.

Count Date: 1-Mar-11 Site #: 0000520006

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	36	36	322	322	44	44	1	1	4	4	2	2	0	0	0	0	0	0	2	2
7:30:00	74	38	734	412	105	61	1	0	10	6	4	2	0	0	0	0	0	0	3	1
7:45:00	119	45	1123	389	172	67	1	0	19	9	7	3	0	0	0	0	0	0	9	6
8:00:00	187	68	1523	400	264	92	1	0	25	6	9	2	0	0	0	0	0	0	12	3
8:15:00	223	36	1925	402	368	104	1	0	33	8	13	4	0	0	0	0	0	0	15	3
8:30:00	281	58	2335	410	441	73	3	2	39	6	14	1	0	0	0	0	0	0	17	2
8:45:00	339	58	2707	372	505	64	4	1	45	6	19	5	0	0	0	0	0	0	17	0
9:00:00	383	44	3023	316	579	74	6	2	50	5	21	2	0	0	0	0	0	0	18	1
9:00:24	384	1	3040	17	581	2	6	0	50	0	21	0	0	0	0	0	0	0	18	0
11:00:00	384	0	3040	0	581	0	6	0	50	0	21	0	0	0	0	0	0	0	18	0
11:15:00	397	13	3105	65	616	35	9	3	55	5	24	3	0	0	0	0	0	0	18	0
11:30:00	413	16	3179	74	667	51	9	0	55	0	25	1	0	0	0	0	0	0	18	0
11:45:00	434	21	3263	84	701	34	12	3	56	1	29	4	0	0	0	0	0	0	18	0
12:00:00	445	11	3330	67	744	43	12	0	62	6	31	2	0	0	0	0	0	0	18	0
12:15:00	464	19	3391	61	776	32	14	2	64	2	35	4	0	0	0	0	0	0	18	0
12:30:00	485	21	3464	73	818	42	15	1	65	1	36	1	0	0	0	0	0	0	20	2
12:45:00	502	17	3534	70	860	42	18	3	66	1	41	5	0	0	0	0	0	0	23	3
13:00:00	521	19	3595	61	903	43	20	2	69	3	44	3	0	0	0	0	0	0	23	0
13:15:00	547	26	3670	75	955	52	23	3	74	5	44	0	0	0	0	0	0	0	25	2
13:30:00	572	25	3754	84	998	43	24	1	77	3	48	4	0	0	0	0	0	0	26	1
13:45:00	595	23	3857	103	1030	32	25	1	80	3	49	1	0	0	0	0	0	0	28	2
14:00:00	616	21	3931	74	1065	35	27	2	83	3	52	3	0	0	0	0	0	0	29	1
14:00:15	616	0	3931	0	1065	0	27	0	83	0	52	0	0	0	0	0	0	0	29	0
15:00:00	616	0	3931	0	1065	0	27	0	83	0	52	0	0	0	0	0	0	0	29	0
15:15:00	642	26	4041	110	1104	39	28	1	86	3	55	3	0	0	0	0	0	0	30	1
15:30:00	659	17	4125	84	1145	41	28	0	91	5	61	6	0	0	0	0	0	0	49	19
15:45:00	690	31	4226	101	1202	57	31	3	97	6	64	3	0	0	0	0	0	0	55	6
16:00:00	708	18	4330	104	1248	46	32	1	106	9	69	5	0	0	0	0	0	0	60	5
16:15:00	734	26	4420	90	1298	50	33	1	110	4	70	1	0	0	0	0	0	0	61	1
16:30:00	752	18	4499	79	1356	58	33	0	115	5	74	4	0	0	0	0	0	0	61	0
16:45:00	784	32	4597	98	1397	41	35	2	119	4	76	2	0	0	0	0	0	0	62	1
17:00:00	811	27	4722	125	1451	54	35	0	122	3	78	2	0	0	0	0	0	0	62	0
17:15:00	835	24	4810	88	1512	61	36	1	123	1	78	0	0	0	0	0	0	0	63	1
17:30:00	869	34	4950	140	1562	50	36	0	123	0	81	3	0	0	0	0	0	0	65	2
17:45:00	900	31	5083	133	1614	52	37	1	126	3	81	0	0	0	0	0	0	0	67	2
18:00:00	940	40	5200	117	1669	55	38	1	128	2	83	2	0	0	0	0	0	0	67	0
18:15:00	940	0	5200	0	1669	0	38	0	128	0	83	0	0	0	0	0	0	0	67	0
18:15:26	940	0	5200	0	1669	0	38	0	128	0	83	0	0	0	0	0	0	0	67	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

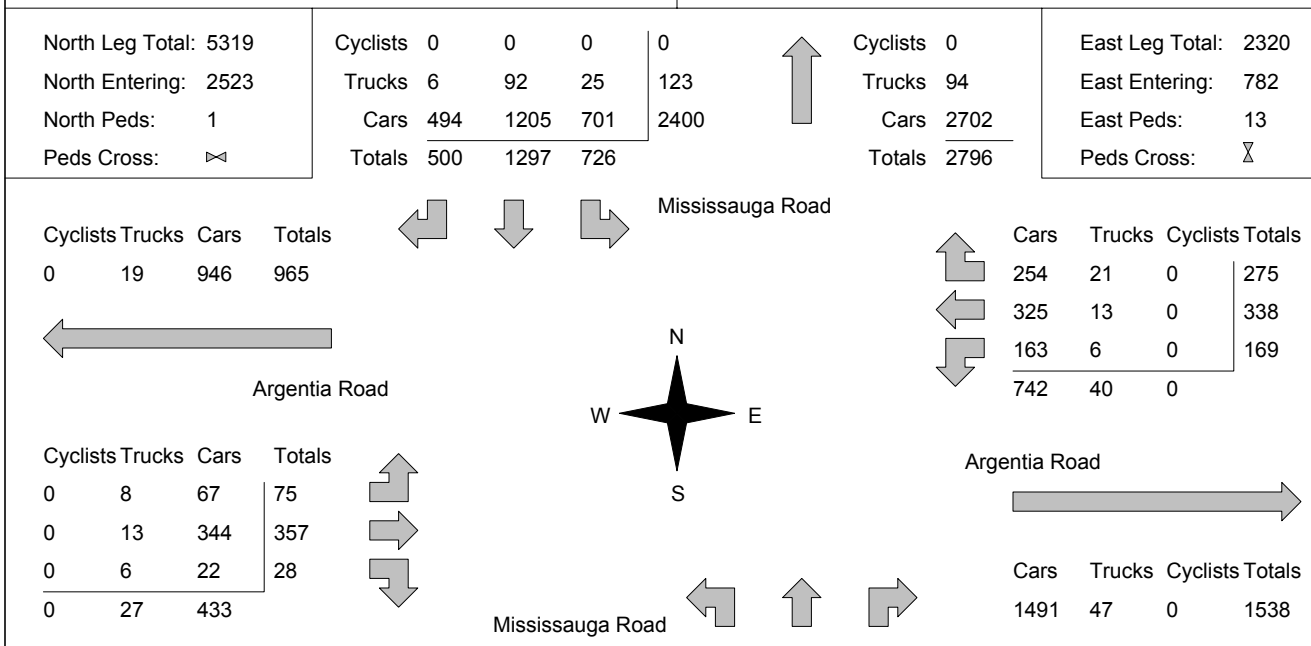
Municipality: Peel
Site #: 0000111131
Intersection: Mississauga Road & Argentia Road
TFR File #: 1
Count date: 20-Dec-11

Weather conditions:
Clear

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

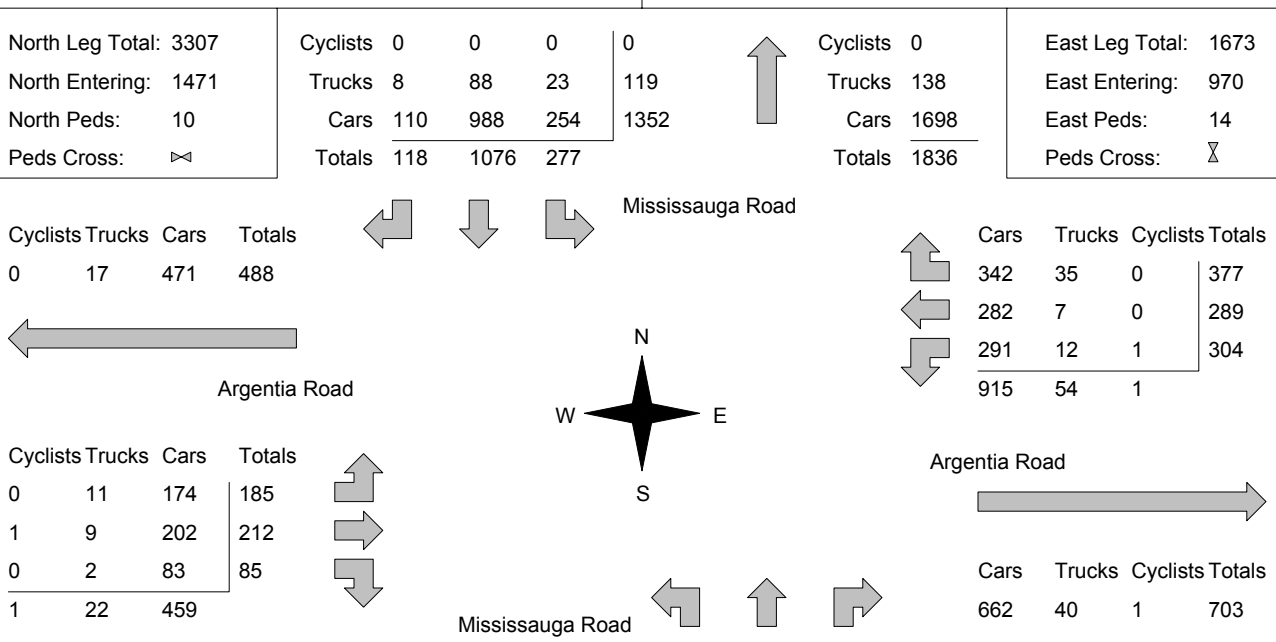
Municipality: Peel
Site #: 0000111131
Intersection: Mississauga Road & Argentia Road
TFR File #: 1
Count date: 20-Dec-11

Weather conditions:
Clear

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

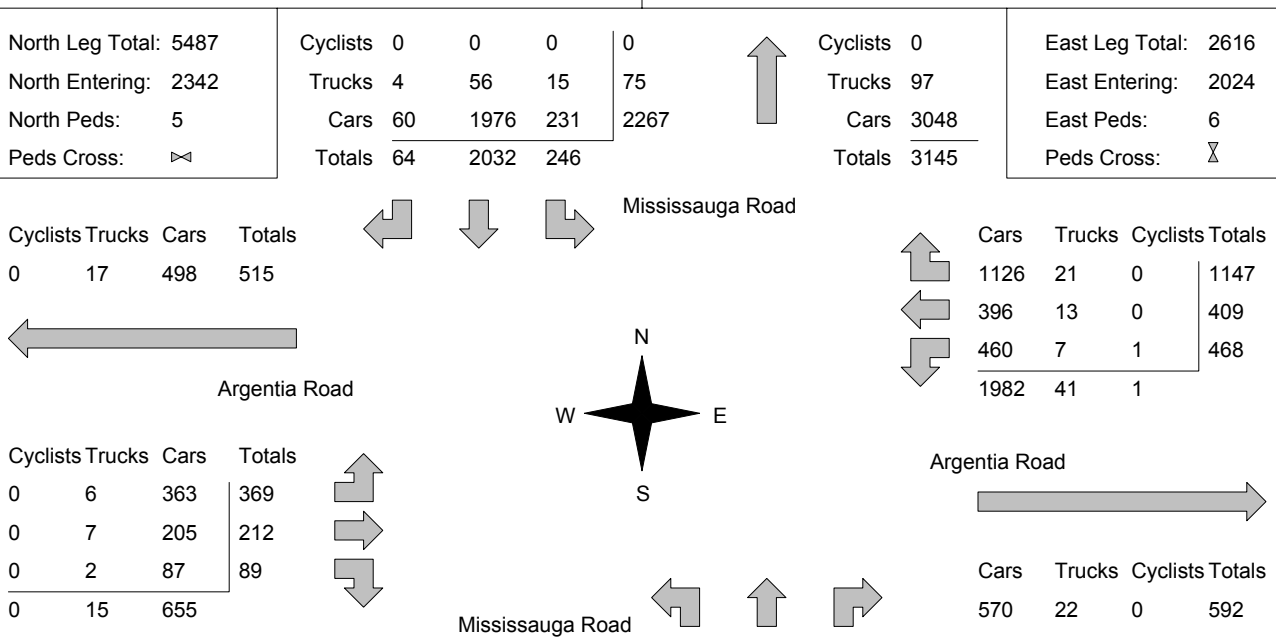
Municipality: Peel
Site #: 0000111131
Intersection: Mississauga Road & Argentia Road
TFR File #: 1
Count date: 20-Dec-11

Weather conditions:
Clear

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Total Count Diagram

Municipality: Peel
Site #: 0000111131
Intersection: Mississauga Road & Argentia Road
TFR File #: 1
Count date: 20-Dec-11

Weather conditions:
Clear

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S

North Leg Total:	33708			
North Entering:	14976			
North Peds:	41			
Peds Cross:	⋈			
Cyclists	0	0	0	0
Trucks	52	590	152	794
Cars	1363	9979	2840	14182
Totals	1415	10569	2992	
Cyclists	1			
Trucks	880			
Cars	17851			
Totals	18732			
East Leg Total:	14645			
East Entering:	8189			
East Peds:	59			
Peds Cross:	⧖			

Mississauga Road

Cyclists	Trucks	Cars	Totals
1	137	4057	4195

Cars	Trucks	Cyclists	Totals
3743	193	1	3937
2118	76	1	2195
2004	51	2	2057
7865	320	4	

Argentia Road

N
W E
S

Cyclists	Trucks	Cars	Totals
0	69	1463	1532
2	68	1641	1711
0	18	428	446
2	155	3532	

Argentia Road

Cars	Trucks	Cyclists	Totals
6183	270	3	6456

Mississauga Road

Peds Cross:	⧖			
West Peds:	12			
West Entering:	3689			
West Leg Total:	7884			
Cars	12411			
Trucks	659			
Cyclists	2			
Totals	13072			
Cars	576	12645	1702	14923
Trucks	9	618	50	677
Cyclists	0	0	1	1
Totals	585	13263	1753	
Peds Cross:	⋈			
South Peds:	57			
South Entering:	15601			
South Leg Total:	28673			

Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Mississauga Road & Argentia Roa | **Count Date:** 20-Dec-11 | **Municipality:** Peel

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	20
8:00:00	719	1179	337	2235	3	4680
9:00:00	726	1297	500	2523	1	5551
11:00:00	0	1	0	1	0	15
12:00:00	300	1022	131	1453	3	2710
13:00:00	277	1076	118	1471	10	3040
14:00:00	303	841	106	1250	12	3059
15:00:00	0	0	0	0	0	18
16:00:00	221	1280	100	1601	4	3480
17:00:00	209	1750	69	2028	7	3926
18:00:00	237	2123	54	2414	1	4068
Totals:	2992	10569	1415	14976	41	30567

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	14	6	20	0
8:00:00	83	2031	331	2445	17
9:00:00	127	2446	455	3028	28
11:00:00	2	9	3	14	0
12:00:00	54	1098	105	1257	2
13:00:00	81	1274	214	1569	3
14:00:00	101	1481	227	1809	3
15:00:00	3	14	1	18	0
16:00:00	56	1671	152	1879	0
17:00:00	39	1697	162	1898	4
18:00:00	38	1520	96	1654	0
Totals:	584	13255	1752	15591	57

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	1	2	3	6	0	7
8:00:00	113	187	176	476	2	882
9:00:00	169	338	275	782	13	1242
11:00:00	2	9	6	17	0	20
12:00:00	201	182	368	751	2	1058
13:00:00	304	289	377	970	14	1452
14:00:00	175	211	271	657	3	1004
15:00:00	4	8	5	17	0	21
16:00:00	223	209	542	974	4	1445
17:00:00	379	343	957	1679	14	2296
18:00:00	485	411	956	1852	7	2443
Totals:	2056	2189	3936	8181	59	11870

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	1	0	1	0
8:00:00	62	332	12	406	4
9:00:00	75	357	28	460	3
11:00:00	1	2	0	3	0
12:00:00	155	97	55	307	0
13:00:00	185	212	85	482	0
14:00:00	120	175	52	347	4
15:00:00	0	4	0	4	0
16:00:00	259	144	68	471	1
17:00:00	353	179	85	617	0
18:00:00	322	208	61	591	0
Totals:	1532	1711	446	3689	12

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	527	630	543	791	521	695	1086	1219

Ontario Traffic Inc.

Count Date: 20-Dec-11 Site #: 0000111131

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	129	129	208	208	36	36	3	3	16	16	1	1	0	0	0	0	0	0	1	1
7:30:00	317	188	491	283	107	71	6	3	34	18	3	2	0	0	0	0	0	0	2	1
7:45:00	504	187	834	343	183	76	12	6	48	14	3	0	0	0	0	0	0	0	2	0
8:00:00	703	199	1115	281	333	150	16	4	64	16	4	1	0	0	0	0	0	0	3	1
8:15:00	901	198	1451	336	473	140	20	4	88	24	6	2	0	0	0	0	0	0	4	1
8:30:00	1059	158	1737	286	587	114	28	8	105	17	6	0	0	0	0	0	0	0	4	0
8:45:00	1249	190	2042	305	689	102	35	7	134	29	9	3	0	0	0	0	0	0	4	0
9:00:00	1404	155	2320	278	827	138	41	6	156	22	10	1	0	0	0	0	0	0	4	0
9:00:25	1404	0	2320	0	827	0	41	0	156	0	10	0	0	0	0	0	0	0	4	0
11:00:00	1404	0	2321	1	827	0	41	0	156	0	10	0	0	0	0	0	0	0	4	0
11:15:00	1471	67	2512	191	850	23	47	6	181	25	14	4	0	0	0	0	0	0	4	0
11:30:00	1521	50	2748	236	883	33	57	10	200	19	15	1	0	0	0	0	0	0	5	1
11:45:00	1599	78	2965	217	909	26	65	8	226	26	16	1	0	0	0	0	0	0	5	0
12:00:00	1674	75	3254	289	950	41	71	6	245	19	18	2	0	0	0	0	0	0	7	2
12:15:00	1746	72	3539	285	984	34	78	7	270	25	20	2	0	0	0	0	0	0	9	2
12:30:00	1797	51	3791	252	1014	30	80	2	291	21	20	0	0	0	0	0	0	0	10	1
12:45:00	1856	59	4037	246	1033	19	90	10	313	22	22	2	0	0	0	0	0	0	12	2
13:00:00	1928	72	4242	205	1060	27	94	4	333	20	26	4	0	0	0	0	0	0	17	5
13:15:00	1990	62	4424	182	1085	25	103	9	353	20	28	2	0	0	0	0	0	0	19	2
13:30:00	2058	68	4625	201	1112	27	106	3	373	20	30	2	0	0	0	0	0	0	23	4
13:45:00	2133	75	4832	207	1135	23	111	5	391	18	31	1	0	0	0	0	0	0	25	2
14:00:00	2211	78	5011	179	1160	25	114	3	405	14	32	1	0	0	0	0	0	0	29	4
14:00:58	2211	0	5011	0	1160	0	114	0	405	0	32	0	0	0	0	0	0	0	29	0
15:00:00	2211	0	5011	0	1160	0	114	0	405	0	32	0	0	0	0	0	0	0	29	0
15:15:00	2256	45	5268	257	1185	25	119	5	421	16	33	1	0	0	0	0	0	0	29	0
15:30:00	2320	64	5562	294	1216	31	121	2	442	21	36	3	0	0	0	0	0	0	29	0
15:45:00	2369	49	5866	304	1230	14	121	0	456	14	38	2	0	0	0	0	0	0	31	2
16:00:00	2423	54	6225	359	1250	20	123	2	471	15	42	4	0	0	0	0	0	0	33	2
16:15:00	2469	46	6570	345	1269	19	128	5	491	20	45	3	0	0	0	0	0	0	34	1
16:30:00	2513	44	6956	386	1285	16	135	7	505	14	47	2	0	0	0	0	0	0	35	1
16:45:00	2558	45	7446	490	1296	11	140	5	528	23	50	3	0	0	0	0	0	0	37	2
17:00:00	2612	54	7908	462	1311	15	143	3	538	10	50	0	0	0	0	0	0	0	40	3
17:15:00	2680	68	8369	461	1331	20	146	3	550	12	51	1	0	0	0	0	0	0	40	0
17:30:00	2744	64	8932	563	1345	14	150	4	561	11	51	0	0	0	0	0	0	0	40	0
17:45:00	2795	51	9444	512	1355	10	151	1	577	16	52	1	0	0	0	0	0	0	40	0
18:00:00	2840	45	9979	535	1363	8	152	1	590	13	52	0	0	0	0	0	0	0	41	1
18:00:22	2840	0	9979	0	1363	0	152	0	590	0	52	0	0	0	0	0	0	0	41	0

Ontario Traffic Inc.

Count Date: 20-Dec-11 Site #: 0000111131

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	1	1	2	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	21	20	32	30	48	45	0	0	2	2	0	0	0	0	0	0	0	0	1	1
7:30:00	44	23	59	27	91	43	0	0	4	2	3	3	0	0	0	0	0	0	2	1
7:45:00	70	26	109	50	129	38	1	1	5	1	5	2	0	0	0	0	0	0	2	0
8:00:00	112	42	182	73	167	38	2	1	7	2	12	7	0	0	0	0	0	0	2	0
8:15:00	165	53	255	73	224	57	2	0	11	4	17	5	0	0	0	0	0	0	11	9
8:30:00	210	45	342	87	302	78	6	4	12	1	25	8	0	0	0	0	0	0	15	4
8:45:00	239	29	417	75	373	71	7	1	15	3	27	2	0	0	0	0	0	0	15	0
9:00:00	275	36	507	90	421	48	8	1	20	5	33	6	0	0	0	0	0	0	15	0
9:00:25	277	2	516	9	424	3	8	0	20	0	33	0	0	0	0	0	0	0	15	0
11:00:00	277	0	516	0	426	2	8	0	20	0	34	1	0	0	0	0	0	0	15	0
11:15:00	299	22	545	29	497	71	10	2	24	4	38	4	0	0	0	0	0	0	15	0
11:30:00	329	30	578	33	573	76	11	1	24	0	47	9	0	0	0	0	0	0	15	0
11:45:00	385	56	618	40	666	93	13	2	25	1	65	18	0	0	0	0	0	0	15	0
12:00:00	471	86	689	71	758	92	15	2	29	4	70	5	0	0	0	0	0	0	17	2
12:15:00	574	103	793	104	854	96	20	5	30	1	80	10	0	0	0	0	0	0	17	0
12:30:00	650	76	861	68	946	92	23	3	32	2	92	12	1	1	0	0	0	0	25	8
12:45:00	716	66	902	41	1043	97	25	2	34	2	99	7	1	0	0	0	0	0	26	1
13:00:00	762	46	971	69	1100	57	27	2	36	2	105	6	1	0	0	0	0	0	31	5
13:15:00	819	57	1035	64	1161	61	29	2	39	3	115	10	1	0	0	0	0	0	32	1
13:30:00	856	37	1077	42	1221	60	30	1	41	2	118	3	1	0	0	0	0	0	33	1
13:45:00	900	44	1139	62	1272	51	30	0	44	3	125	7	1	0	0	0	0	0	34	1
14:00:00	933	33	1173	34	1342	70	31	1	45	1	134	9	1	0	0	0	0	0	34	0
14:00:58	937	4	1181	8	1345	3	31	0	45	0	134	0	1	0	0	0	0	0	34	0
15:00:00	937	0	1181	0	1347	2	31	0	45	0	134	0	1	0	0	0	0	0	34	0
15:15:00	991	54	1229	48	1462	115	32	1	48	3	137	3	1	0	0	0	0	0	34	0
15:30:00	1029	38	1272	43	1571	109	35	3	52	4	148	11	1	0	0	0	0	0	35	1
15:45:00	1076	47	1322	50	1736	165	38	3	52	0	153	5	1	0	0	0	0	0	36	1
16:00:00	1150	74	1381	59	1864	128	41	3	54	2	159	6	1	0	0	0	0	0	38	2
16:15:00	1235	85	1455	74	2067	203	42	1	57	3	162	3	1	0	0	0	0	0	44	6
16:30:00	1314	79	1533	78	2234	167	42	0	59	2	168	6	1	0	0	0	0	0	47	3
16:45:00	1415	101	1615	82	2545	311	43	1	61	2	176	8	1	0	0	0	0	0	47	0
17:00:00	1522	107	1712	97	2796	251	47	4	66	5	184	8	2	1	0	0	0	0	52	5
17:15:00	1665	143	1823	111	3112	316	49	2	69	3	187	3	2	0	0	0	0	0	53	1
17:30:00	1774	109	1929	106	3360	248	49	0	72	3	189	2	2	0	0	0	0	0	53	0
17:45:00	1902	128	2030	101	3581	221	49	0	74	2	191	2	2	0	1	1	1	1	59	6
18:00:00	2003	101	2112	82	3742	161	51	2	76	2	193	2	2	0	1	0	1	0	59	0
18:00:22	2004	1	2118	6	3743	1	51	0	76	0	193	0	2	0	1	0	1	0	59	0

Ontario Traffic Inc.

Count Date: 20-Dec-11 Site #: 0000111131

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	14	14	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	16	16	397	383	70	64	0	0	12	12	1	1	0	0	0	0	0	0	0	0
7:30:00	32	16	848	451	143	73	0	0	27	15	3	2	0	0	0	0	0	0	16	16
7:45:00	52	20	1456	608	228	85	0	0	41	14	5	2	0	0	0	0	0	0	17	1
8:00:00	82	30	1977	521	328	100	1	1	68	27	9	4	0	0	0	0	0	0	17	0
8:15:00	95	13	2620	643	427	99	1	0	82	14	10	1	0	0	0	0	0	0	31	14
8:30:00	121	26	3222	602	556	129	1	0	91	9	16	6	0	0	0	0	0	0	45	14
8:45:00	163	42	3779	557	662	106	1	0	112	21	17	1	0	0	0	0	0	0	45	0
9:00:00	209	46	4358	579	774	112	1	0	133	21	18	1	0	0	0	0	0	0	45	0
9:00:25	211	2	4365	7	777	3	1	0	133	0	18	0	0	0	0	0	0	0	45	0
11:00:00	211	0	4367	2	777	0	1	0	133	0	18	0	0	0	0	0	0	0	45	0
11:15:00	224	13	4575	208	797	20	2	1	151	18	19	1	0	0	0	0	0	0	45	0
11:30:00	237	13	4848	273	817	20	2	0	175	24	20	1	0	0	0	0	0	0	45	0
11:45:00	252	15	5102	254	841	24	3	1	191	16	21	1	0	0	0	0	0	0	45	0
12:00:00	262	10	5380	278	877	36	4	1	218	27	23	2	0	0	0	0	0	0	47	2
12:15:00	284	22	5619	239	913	36	5	1	247	29	24	1	0	0	0	0	0	0	47	0
12:30:00	293	9	5923	304	943	30	5	0	269	22	26	2	0	0	0	0	0	0	49	2
12:45:00	316	23	6197	274	1004	61	6	1	287	18	29	3	0	0	0	0	0	0	50	1
13:00:00	341	25	6562	365	1083	79	6	0	310	23	31	2	0	0	0	0	0	0	50	0
13:15:00	369	28	6881	319	1144	61	6	0	333	23	33	2	0	0	0	0	0	0	51	1
13:30:00	397	28	7220	339	1208	64	7	1	359	26	35	2	0	0	0	0	0	0	51	0
13:45:00	418	21	7581	361	1250	42	8	1	376	17	36	1	0	0	0	0	0	0	53	2
14:00:00	440	22	7948	367	1304	54	8	0	405	29	37	1	0	0	0	0	0	0	53	0
14:00:58	440	0	7952	4	1305	1	8	0	405	0	37	0	0	0	0	0	0	0	53	0
15:00:00	443	3	7962	10	1305	0	8	0	405	0	37	0	0	0	0	0	0	0	53	0
15:15:00	448	5	8329	367	1337	32	9	1	428	23	41	4	0	0	0	0	0	0	53	0
15:30:00	462	14	8770	441	1382	45	9	0	459	31	43	2	0	0	0	0	1	1	53	0
15:45:00	487	25	9217	447	1417	35	9	0	480	21	45	2	0	0	0	0	1	0	53	0
16:00:00	498	11	9541	324	1446	29	9	0	497	17	47	2	0	0	0	0	1	0	53	0
16:15:00	511	13	10016	475	1489	43	9	0	512	15	47	0	0	0	0	0	1	0	53	0
16:30:00	514	3	10377	361	1522	33	9	0	529	17	48	1	0	0	0	0	1	0	57	4
16:45:00	526	12	10767	390	1566	44	9	0	543	14	48	0	0	0	0	0	1	0	57	0
17:00:00	537	11	11163	396	1607	41	9	0	572	29	48	0	0	0	0	0	1	0	57	0
17:15:00	539	2	11529	366	1631	24	9	0	582	10	48	0	0	0	0	0	1	0	57	0
17:30:00	556	17	11936	407	1656	25	9	0	599	17	48	0	0	0	0	0	1	0	57	0
17:45:00	561	5	12294	358	1683	27	9	0	607	8	49	1	0	0	0	0	1	0	57	0
18:00:00	575	14	12637	343	1701	18	9	0	618	11	50	1	0	0	0	0	1	0	57	0
18:00:22	576	1	12645	8	1702	1	9	0	618	0	50	0	0	0	0	0	1	0	57	0

Ontario Traffic Inc.

Count Date: 20-Dec-11 Site #: 0000111131

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:15:00	14	14	66	66	1	1	0	0	2	1	1	1	0	0	0	0	0	0	0	0
7:30:00	21	7	129	63	3	2	1	1	6	4	1	0	0	0	0	0	0	0	3	3
7:45:00	44	23	213	84	6	3	2	1	9	3	1	0	0	0	0	0	0	0	3	0
8:00:00	60	16	321	108	11	5	2	0	12	3	1	0	0	0	0	0	0	0	4	1
8:15:00	75	15	414	93	15	4	3	1	15	3	2	1	0	0	0	0	0	0	4	0
8:30:00	95	20	519	105	20	5	5	2	19	4	4	2	0	0	0	0	0	0	6	2
8:45:00	110	15	596	77	28	8	5	0	21	2	7	3	0	0	0	0	0	0	7	1
9:00:00	127	17	665	69	33	5	10	5	25	4	7	0	0	0	0	0	0	0	7	0
9:00:25	127	0	665	0	33	0	10	0	25	0	7	0	0	0	0	0	0	0	7	0
11:00:00	128	1	667	2	33	0	10	0	25	0	7	0	0	0	0	0	0	0	7	0
11:15:00	159	31	682	15	44	11	13	3	26	1	7	0	0	0	0	0	0	0	7	0
11:30:00	195	36	711	29	60	16	15	2	28	2	8	1	0	0	0	0	0	0	7	0
11:45:00	238	43	737	26	73	13	19	4	29	1	9	1	0	0	0	0	0	0	7	0
12:00:00	274	36	759	22	85	12	19	0	30	1	10	1	0	0	0	0	0	0	7	0
12:15:00	338	64	803	44	108	23	23	4	35	5	10	0	0	0	0	0	0	0	7	0
12:30:00	383	45	845	42	133	25	24	1	36	1	10	0	0	0	1	1	0	0	7	0
12:45:00	411	28	890	45	151	18	27	3	37	1	11	1	0	0	1	0	0	0	7	0
13:00:00	448	37	961	71	168	17	30	3	39	2	12	1	0	0	1	0	0	0	7	0
13:15:00	474	26	1005	44	177	9	36	6	41	2	12	0	0	0	1	0	0	0	8	1
13:30:00	505	31	1060	55	194	17	36	0	42	1	13	1	0	0	1	0	0	0	8	0
13:45:00	536	31	1091	31	208	14	42	6	45	3	15	2	0	0	2	1	0	0	9	1
14:00:00	554	18	1128	37	217	9	44	2	46	1	15	0	0	0	2	0	0	0	11	2
14:00:58	554	0	1128	0	217	0	44	0	46	0	15	0	0	0	2	0	0	0	11	0
15:00:00	554	0	1132	4	217	0	44	0	46	0	15	0	0	0	2	0	0	0	11	0
15:15:00	612	58	1166	34	238	21	50	6	46	0	15	0	0	0	2	0	0	0	11	0
15:30:00	653	41	1186	20	249	11	51	1	49	3	15	0	0	0	2	0	0	0	11	0
15:45:00	730	77	1229	43	268	19	52	1	51	2	16	1	0	0	2	0	0	0	12	1
16:00:00	804	74	1268	39	284	16	53	1	54	3	16	0	0	0	2	0	0	0	12	0
16:15:00	895	91	1303	35	304	20	55	2	56	2	16	0	0	0	2	0	0	0	12	0
16:30:00	979	84	1336	33	322	18	59	4	57	1	16	0	0	0	2	0	0	0	12	0
16:45:00	1071	92	1392	56	344	22	60	1	60	3	16	0	0	0	2	0	0	0	12	0
17:00:00	1147	76	1439	47	369	25	63	3	62	2	16	0	0	0	2	0	0	0	12	0
17:15:00	1261	114	1496	57	397	28	63	0	63	1	18	2	0	0	2	0	0	0	12	0
17:30:00	1342	81	1541	45	409	12	65	2	64	1	18	0	0	0	2	0	0	0	12	0
17:45:00	1416	74	1585	44	416	7	67	2	66	2	18	0	0	0	2	0	0	0	12	0
18:00:00	1463	47	1641	56	428	12	69	2	68	2	18	0	0	0	2	0	0	0	12	0
18:00:22	1463	0	1641	0	428	0	69	0	68	0	18	0	0	0	2	0	0	0	12	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

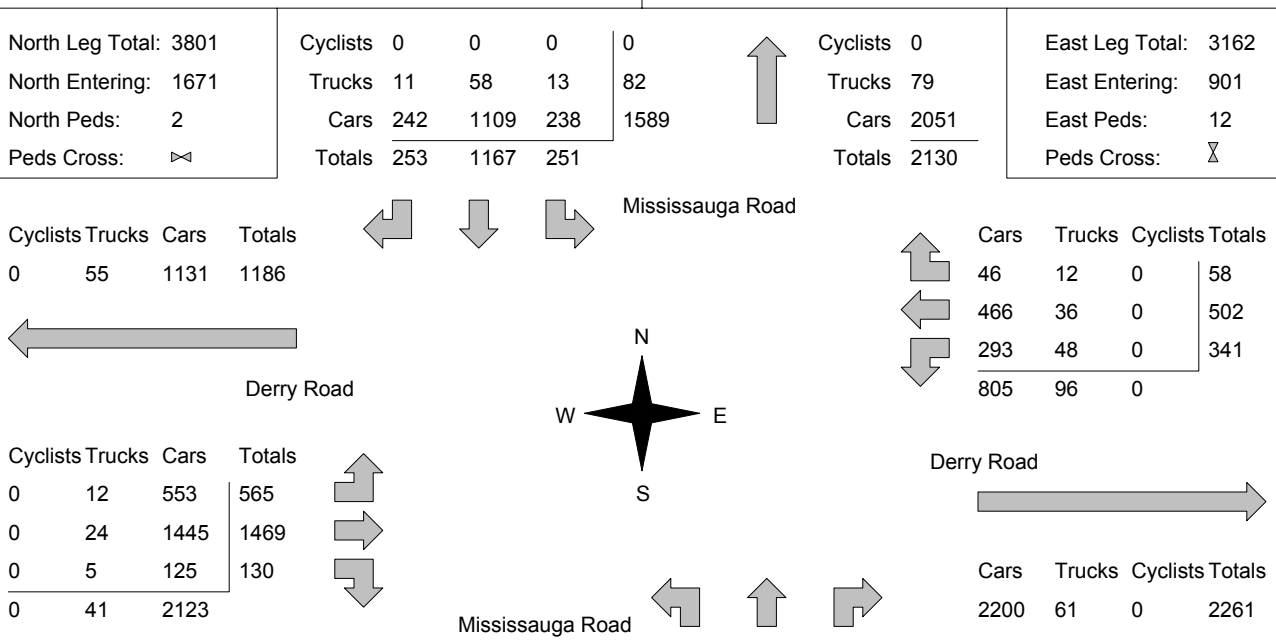
Municipality: Peel
Site #: 0000112422
Intersection: Mississauga Road & Derry Road
TFR File #: 3
Count date: 21-Dec-11

Weather conditions:
Cloudy, Rain

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

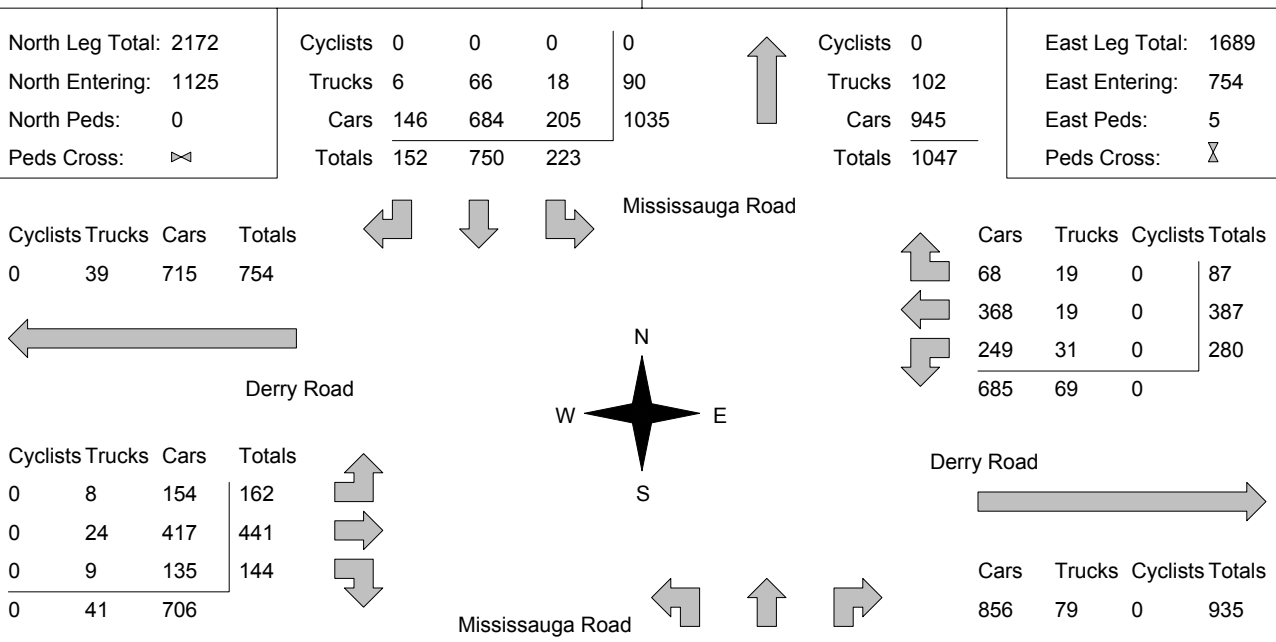
Municipality: Peel
Site #: 0000112422
Intersection: Mississauga Road & Derry Road
TFR File #: 3
Count date: 21-Dec-11

Weather conditions:
Cloudy, Rain

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:15:00
To: 17:15:00

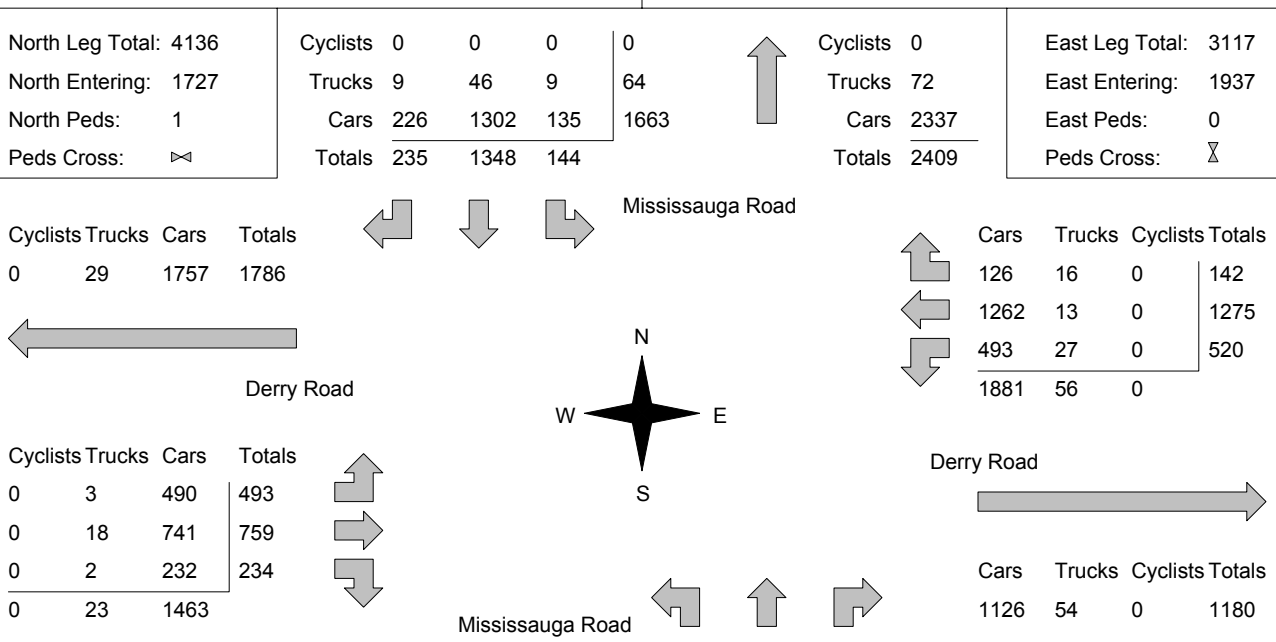
Municipality: Peel
Site #: 0000112422
Intersection: Mississauga Road & Derry Road
TFR File #: 3
Count date: 21-Dec-11

Weather conditions:
Cloudy, Rain

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.

Total Count Diagram

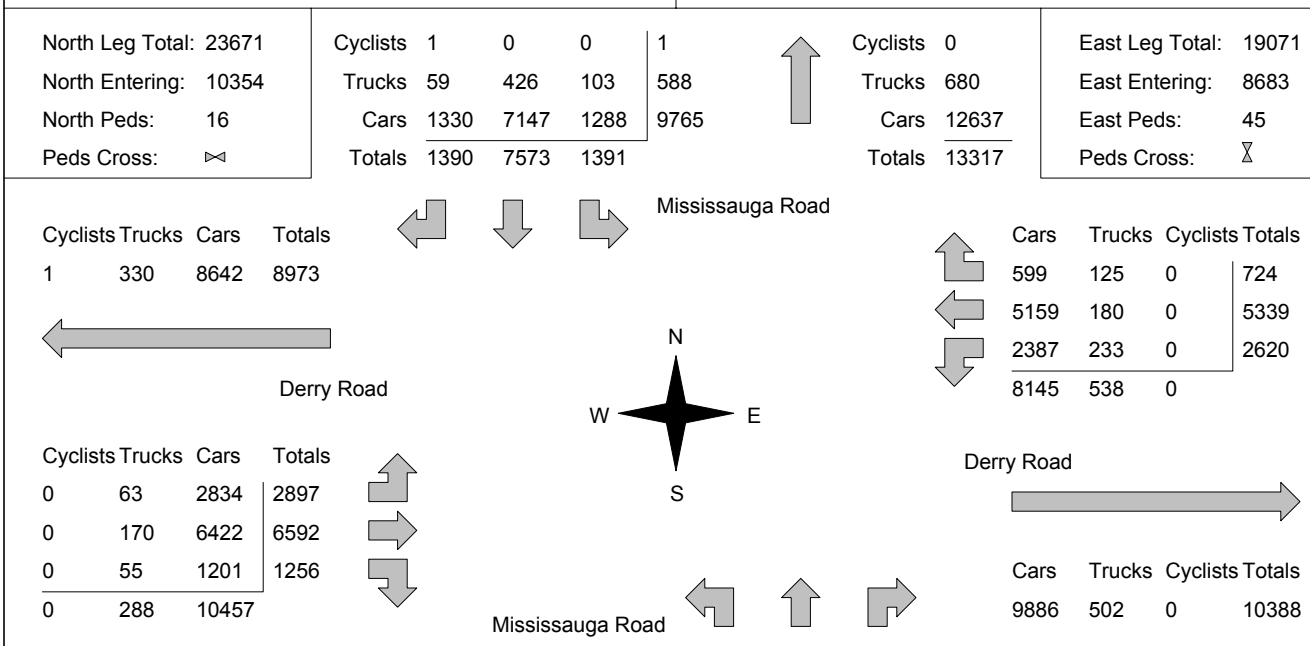
Municipality: Peel
Site #: 0000112422
Intersection: Mississauga Road & Derry Road
TFR File #: 3
Count date: 21-Dec-11

Weather conditions:
Cloudy, Rain

Person(s) who counted:
Sergei Bulyma
Bronislava Bulyma

**** Signalized Intersection ****

Major Road: Mississauga Road runs N/S



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Mississauga Road & Derry Road | **Count Date:** 21-Dec-11 | **Municipality:** Peel

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	1	0	1	0	1
8:00:00	149	980	163	1292	2	3361
9:00:00	264	1192	257	1713	3	4233
11:00:00	1	7	4	12	0	34
12:00:00	191	700	147	1038	3	2168
13:00:00	190	696	135	1021	3	2259
14:00:00	125	651	111	887	1	2145
15:00:00	0	0	1	1	0	19
16:00:00	150	923	142	1215	2	3017
17:00:00	139	1275	227	1641	1	3983
18:00:00	182	1148	203	1533	1	3466
Totals:	1391	7573	1390	10354	16	24686

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	311	1365	393	2069	5
9:00:00	442	1528	550	2520	27
11:00:00	4	10	8	22	0
12:00:00	203	660	267	1130	12
13:00:00	204	803	231	1238	17
14:00:00	224	846	188	1258	23
15:00:00	2	16	0	18	0
16:00:00	263	1277	262	1802	4
17:00:00	302	1746	294	2342	1
18:00:00	280	1441	212	1933	2
Totals:	2235	9692	2405	14332	91

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	225	442	46	713	7	3077
9:00:00	332	461	62	855	8	2857
11:00:00	0	6	2	8	0	38
12:00:00	231	307	65	603	7	1389
13:00:00	280	391	88	759	5	1482
14:00:00	273	418	82	773	10	1565
15:00:00	0	7	2	9	0	19
16:00:00	350	868	104	1322	2	2344
17:00:00	492	1166	140	1798	1	3228
18:00:00	437	1273	133	1843	5	3417
Totals:	2620	5339	724	8683	45	19416

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	490	1702	172	2364	1
9:00:00	558	1347	97	2002	0
11:00:00	18	6	6	30	0
12:00:00	159	434	193	786	0
13:00:00	168	440	115	723	1
14:00:00	220	435	137	792	2
15:00:00	2	2	6	10	0
16:00:00	327	566	129	1022	0
17:00:00	452	770	208	1430	0
18:00:00	503	880	191	1574	0
Totals:	2897	6582	1254	10733	4

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	2424	2267	839	908	952	1551	2112	2216

Ontario Traffic Inc.

Count Date: 21-Dec-11 Site #: 0000112422

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	28	28	209	208	28	28	1	1	5	5	1	1	0	0	0	0	0	0	1	1
7:30:00	72	44	391	182	69	41	4	3	16	11	2	1	0	0	0	0	0	0	2	1
7:45:00	107	35	671	280	112	43	6	2	26	10	3	1	0	0	0	0	0	0	2	0
8:00:00	141	34	944	273	156	44	8	2	37	11	7	4	0	0	0	0	0	0	2	0
8:15:00	203	62	1242	298	221	65	13	5	52	15	11	4	0	0	0	0	0	0	2	0
8:30:00	268	65	1528	286	281	60	15	2	70	18	12	1	0	0	0	0	0	0	4	2
8:45:00	345	77	1780	252	354	73	19	4	84	14	14	2	0	0	0	0	0	0	4	0
9:00:00	391	46	2067	287	404	50	22	3	106	22	16	2	0	0	0	0	0	0	5	1
9:00:37	391	0	2067	0	404	0	22	0	106	0	16	0	0	0	0	0	0	0	5	0
11:00:00	392	1	2074	7	408	4	22	0	106	0	16	0	0	0	0	0	0	0	5	0
11:15:00	416	24	2219	145	441	33	24	2	120	14	16	0	0	0	0	0	0	0	5	0
11:30:00	453	37	2362	143	472	31	27	3	128	8	16	0	0	0	0	0	0	0	5	0
11:45:00	499	46	2539	177	509	37	30	3	145	17	18	2	0	0	0	0	0	0	8	3
12:00:00	570	71	2725	186	551	42	35	5	155	10	20	2	0	0	0	0	0	0	8	0
12:15:00	626	56	2918	193	599	48	37	2	177	22	24	4	0	0	0	0	0	0	8	0
12:30:00	666	40	3064	146	637	38	40	3	195	18	24	0	0	0	0	0	0	0	8	0
12:45:00	704	38	3223	159	655	18	48	8	211	16	24	0	0	0	0	0	0	0	8	0
13:00:00	741	37	3354	131	680	25	54	6	222	11	26	2	0	0	0	0	0	0	11	3
13:15:00	774	33	3496	142	715	35	54	0	242	20	26	0	0	0	0	0	0	0	12	1
13:30:00	798	24	3624	128	736	21	56	2	257	15	28	2	0	0	0	0	0	0	12	0
13:45:00	823	25	3795	171	757	21	59	3	274	17	33	5	0	0	0	0	0	0	12	0
14:00:00	856	33	3928	133	782	25	64	5	299	25	35	2	0	0	0	0	0	0	12	0
14:00:52	856	0	3928	0	782	0	64	0	299	0	35	0	0	0	0	0	0	0	12	0
15:00:00	856	0	3928	0	783	1	64	0	299	0	35	0	0	0	0	0	0	0	12	0
15:15:00	891	35	4141	213	806	23	67	3	310	11	40	5	0	0	0	0	0	0	12	0
15:30:00	919	28	4334	193	846	40	73	6	327	17	41	1	0	0	0	0	0	0	12	0
15:45:00	959	40	4583	249	885	39	78	5	341	14	41	0	0	0	0	0	0	0	13	1
16:00:00	992	33	4798	215	919	34	78	0	352	11	41	0	0	0	0	0	0	0	14	1
16:15:00	1030	38	5063	265	969	50	84	6	360	8	45	4	0	0	0	0	0	0	14	0
16:30:00	1055	25	5389	326	1028	59	87	3	375	15	48	3	0	0	0	0	0	0	14	0
16:45:00	1090	35	5664	275	1089	61	90	3	389	14	49	1	0	0	0	0	0	0	14	0
17:00:00	1119	29	6024	360	1138	49	90	0	401	12	49	0	0	0	0	0	0	0	15	1
17:15:00	1165	46	6365	341	1195	57	93	3	406	5	54	5	0	0	0	0	0	0	15	0
17:30:00	1208	43	6687	322	1249	54	95	2	414	8	56	2	0	0	0	0	1	1	15	0
17:45:00	1249	41	6940	253	1282	33	101	6	421	7	56	0	0	0	0	0	1	0	15	0
18:00:00	1288	39	7147	207	1330	48	103	2	426	5	59	3	0	0	0	0	1	0	16	1
18:00:23	1288	0	7147	0	1330	0	103	0	426	0	59	0	0	0	0	0	1	0	16	0

Ontario Traffic Inc.

Count Date: 21-Dec-11 Site #: 0000112422

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	50	50	71	71	10	10	3	3	2	2	0	0	0	0	0	0	0	0	0	0
7:30:00	84	34	179	108	20	10	6	3	10	8	3	3	0	0	0	0	0	0	2	2
7:45:00	130	46	293	114	27	7	12	6	15	5	4	1	0	0	0	0	0	0	3	1
8:00:00	198	68	419	126	39	12	27	15	23	8	7	3	0	0	0	0	0	0	7	4
8:15:00	275	77	539	120	46	7	41	14	36	13	11	4	0	0	0	0	0	0	9	2
8:30:00	360	85	639	100	62	16	55	14	45	9	13	2	0	0	0	0	0	0	13	4
8:45:00	423	63	759	120	73	11	60	5	51	6	16	3	0	0	0	0	0	0	15	2
9:00:00	489	66	847	88	85	12	68	8	56	5	23	7	0	0	0	0	0	0	15	0
9:00:37	489	0	847	0	85	0	68	0	56	0	23	0	0	0	0	0	0	0	15	0
11:00:00	489	0	852	5	87	2	68	0	57	1	23	0	0	0	0	0	0	0	15	0
11:15:00	543	54	921	69	95	8	75	7	64	7	27	4	0	0	0	0	0	0	15	0
11:30:00	589	46	968	47	104	9	78	3	69	5	30	3	0	0	0	0	0	0	15	0
11:45:00	637	48	1050	82	118	14	87	9	75	6	35	5	0	0	0	0	0	0	18	3
12:00:00	694	57	1138	88	136	18	94	7	78	3	39	4	0	0	0	0	0	0	22	4
12:15:00	761	67	1248	110	145	9	100	6	84	6	43	4	0	0	0	0	0	0	22	0
12:30:00	824	63	1340	92	166	21	107	7	91	7	51	8	0	0	0	0	0	0	23	1
12:45:00	886	62	1418	78	186	20	118	11	94	3	54	3	0	0	0	0	0	0	23	0
13:00:00	946	60	1510	92	203	17	122	4	97	3	60	6	0	0	0	0	0	0	27	4
13:15:00	996	50	1624	114	222	19	133	11	104	7	64	4	0	0	0	0	0	0	28	1
13:30:00	1048	52	1703	79	233	11	142	9	110	6	69	5	0	0	0	0	0	0	35	7
13:45:00	1132	84	1794	91	242	9	149	7	114	4	76	7	0	0	0	0	0	0	37	2
14:00:00	1188	56	1907	113	264	22	153	4	118	4	81	5	0	0	0	0	0	0	37	0
14:00:52	1188	0	1907	0	264	0	153	0	118	0	81	0	0	0	0	0	0	0	37	0
15:00:00	1188	0	1914	7	266	2	153	0	118	0	81	0	0	0	0	0	0	0	37	0
15:15:00	1269	81	2087	173	292	26	162	9	123	5	84	3	0	0	0	0	0	0	38	1
15:30:00	1354	85	2300	213	311	19	171	9	134	11	89	5	0	0	0	0	0	0	39	1
15:45:00	1418	64	2489	189	330	19	178	7	143	9	95	6	0	0	0	0	0	0	39	0
16:00:00	1505	87	2752	263	348	18	186	8	148	5	103	8	0	0	0	0	0	0	39	0
16:15:00	1629	124	2998	246	380	32	190	4	152	4	104	1	0	0	0	0	0	0	40	1
16:30:00	1751	122	3281	283	415	35	203	13	155	3	110	6	0	0	0	0	0	0	40	0
16:45:00	1862	111	3549	268	440	25	208	5	158	3	111	1	0	0	0	0	0	0	40	0
17:00:00	1967	105	3903	354	476	36	216	8	163	5	115	4	0	0	0	0	0	0	40	0
17:15:00	2122	155	4260	357	506	30	217	1	165	2	120	5	0	0	0	0	0	0	40	0
17:30:00	2235	113	4575	315	532	26	221	4	173	8	121	1	0	0	0	0	0	0	42	2
17:45:00	2333	98	4872	297	563	31	229	8	176	3	124	3	0	0	0	0	0	0	45	3
18:00:00	2387	54	5159	287	599	36	233	4	180	4	125	1	0	0	0	0	0	0	45	0
18:00:23	2387	0	5159	0	599	0	233	0	180	0	125	0	0	0	0	0	0	0	45	0

Ontario Traffic Inc.

Count Date: 21-Dec-11 Site #: 0000112422

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	69	69	327	327	63	63	3	3	18	18	4	4	0	0	0	0	0	0	3	3
7:30:00	134	65	648	321	162	99	7	4	36	18	10	6	0	0	0	0	0	0	3	0
7:45:00	202	68	972	324	253	91	11	4	55	19	15	5	0	0	0	0	0	0	3	0
8:00:00	299	97	1294	322	370	117	12	1	71	16	23	8	0	0	0	0	0	0	5	2
8:15:00	413	114	1683	389	515	145	14	2	83	12	28	5	0	0	0	0	0	0	5	0
8:30:00	542	129	2089	406	635	120	18	4	99	16	32	4	0	0	0	0	0	0	5	0
8:45:00	625	83	2424	335	770	135	19	1	110	11	39	7	0	0	0	0	0	0	28	23
9:00:00	732	107	2767	343	901	131	21	2	126	16	42	3	0	0	0	0	0	0	32	4
9:00:37	732	0	2775	8	909	8	21	0	126	0	42	0	0	0	0	0	0	0	32	0
11:00:00	736	4	2777	2	909	0	21	0	126	0	42	0	0	0	0	0	0	0	32	0
11:15:00	774	38	2916	139	967	58	23	2	146	20	49	7	0	0	0	0	0	0	32	0
11:30:00	824	50	3070	154	1013	46	31	8	162	16	59	10	0	0	0	0	0	0	33	1
11:45:00	867	43	3217	147	1071	58	34	3	183	21	72	13	0	0	0	0	0	0	33	0
12:00:00	922	55	3361	144	1133	62	38	4	202	19	85	13	0	0	0	0	0	0	44	11
12:15:00	965	43	3571	210	1194	61	43	5	222	20	95	10	0	0	0	0	0	0	52	8
12:30:00	1021	56	3723	152	1245	51	45	2	244	22	104	9	0	0	0	0	0	0	52	0
12:45:00	1068	47	3940	217	1305	60	48	3	258	14	109	5	0	0	0	0	0	0	54	2
13:00:00	1112	44	4091	151	1336	31	52	4	275	17	113	4	0	0	0	0	0	0	61	7
13:15:00	1171	59	4322	231	1379	43	55	3	297	22	121	8	0	0	0	0	0	0	70	9
13:30:00	1221	50	4490	168	1414	35	58	3	308	11	129	8	0	0	0	0	0	0	80	10
13:45:00	1270	49	4700	210	1453	39	61	3	325	17	137	8	0	0	0	0	0	0	80	0
14:00:00	1322	52	4877	177	1494	41	66	5	335	10	143	6	0	0	0	0	0	0	84	4
14:00:52	1324	2	4890	13	1494	0	66	0	336	1	143	0	0	0	0	0	0	0	84	0
15:00:00	1324	0	4892	2	1494	0	66	0	336	0	143	0	0	0	0	0	0	0	84	0
15:15:00	1393	69	5141	249	1534	40	67	1	352	16	144	1	0	0	0	0	0	0	84	0
15:30:00	1444	51	5439	298	1572	38	69	2	364	12	151	7	0	0	0	0	0	0	84	0
15:45:00	1510	66	5718	279	1632	60	72	3	378	14	161	10	0	0	0	0	0	0	84	0
16:00:00	1580	70	6110	392	1718	86	73	1	395	17	181	20	0	0	0	0	0	0	88	4
16:15:00	1642	62	6466	356	1787	69	73	0	411	16	193	12	0	0	0	0	0	0	88	0
16:30:00	1696	54	6941	475	1866	79	74	1	423	12	207	14	0	0	0	0	0	0	88	0
16:45:00	1792	96	7348	407	1915	49	77	3	437	14	209	2	0	0	0	0	0	0	88	0
17:00:00	1876	84	7797	449	1976	61	79	2	454	17	217	8	0	0	0	0	0	0	89	1
17:15:00	1911	35	8187	390	2037	61	80	1	464	10	220	3	0	0	0	0	0	0	89	0
17:30:00	1972	61	8562	375	2096	59	83	3	472	8	224	4	0	0	0	0	0	0	89	0
17:45:00	2043	71	8911	349	2151	55	86	3	483	11	227	3	0	0	0	0	0	0	91	2
18:00:00	2144	101	9200	289	2176	25	91	5	492	9	229	2	0	0	0	0	0	0	91	0
18:00:23	2153	9	9204	4	2176	0	91	0	492	0	229	0	0	0	0	0	0	0	91	0

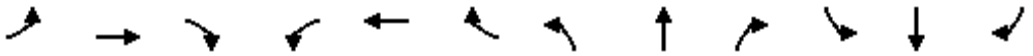
Ontario Traffic Inc.

Count Date: 21-Dec-11 Site #: 0000112422

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	112	112	424	424	29	29	0	0	6	6	1	1	0	0	0	0	0	0	0	0
7:30:00	214	102	942	518	68	39	3	3	8	2	5	4	0	0	0	0	0	0	0	0
7:45:00	341	127	1317	375	112	44	5	2	16	8	6	1	0	0	0	0	0	0	0	0
8:00:00	480	139	1678	361	163	51	10	5	24	8	9	3	0	0	0	0	0	0	1	1
8:15:00	602	122	2118	440	187	24	14	4	31	7	10	1	0	0	0	0	0	0	1	0
8:30:00	723	121	2442	324	217	30	15	1	35	4	11	1	0	0	0	0	0	0	1	0
8:45:00	894	171	2762	320	237	20	17	2	40	5	11	0	0	0	0	0	0	0	1	0
9:00:00	1029	135	3005	243	258	21	19	2	44	4	11	0	0	0	0	0	0	0	1	0
9:00:37	1045	16	3009	4	262	4	19	0	44	0	11	0	0	0	0	0	0	0	1	0
11:00:00	1047	2	3011	2	264	2	19	0	44	0	11	0	0	0	0	0	0	0	1	0
11:15:00	1076	29	3099	88	301	37	20	1	48	4	14	3	0	0	0	0	0	0	1	0
11:30:00	1108	32	3213	114	354	53	21	1	54	6	20	6	0	0	0	0	0	0	1	0
11:45:00	1164	56	3315	102	393	39	23	2	59	5	22	2	0	0	0	0	0	0	1	0
12:00:00	1201	37	3424	109	444	51	24	1	65	6	24	2	0	0	0	0	0	0	1	0
12:15:00	1231	30	3527	103	474	30	27	3	71	6	27	3	0	0	0	0	0	0	1	0
12:30:00	1285	54	3623	96	501	27	30	3	79	8	29	2	0	0	0	0	0	0	2	1
12:45:00	1318	33	3732	109	528	27	31	1	83	4	31	2	0	0	0	0	0	0	2	0
13:00:00	1360	42	3841	109	551	23	33	2	88	5	32	1	0	0	0	0	0	0	2	0
13:15:00	1398	38	3951	110	578	27	35	2	93	5	35	3	0	0	0	0	0	0	2	0
13:30:00	1464	66	4040	89	603	25	35	0	98	5	38	3	0	0	0	0	0	0	2	0
13:45:00	1515	51	4129	89	643	40	37	2	100	2	41	3	0	0	0	0	0	0	2	0
14:00:00	1571	56	4258	129	677	34	42	5	106	6	43	2	0	0	0	0	0	0	4	2
14:00:52	1571	0	4260	2	683	6	42	0	106	0	43	0	0	0	0	0	0	0	4	0
15:00:00	1572	1	4260	0	683	0	43	1	106	0	43	0	0	0	0	0	0	0	4	0
15:15:00	1628	56	4376	116	728	45	43	0	113	7	44	1	0	0	0	0	0	0	4	0
15:30:00	1714	86	4528	152	748	20	45	2	119	6	48	4	0	0	0	0	0	0	4	0
15:45:00	1803	89	4690	162	783	35	49	4	125	6	49	1	0	0	0	0	0	0	4	0
16:00:00	1891	88	4804	114	805	22	51	2	128	3	50	1	0	0	0	0	0	0	4	0
16:15:00	1991	100	5027	223	859	54	55	4	134	6	51	1	0	0	0	0	0	0	4	0
16:30:00	2087	96	5191	164	909	50	56	1	139	5	52	1	0	0	0	0	0	0	4	0
16:45:00	2221	134	5386	195	962	53	56	0	145	6	52	0	0	0	0	0	0	0	4	0
17:00:00	2337	116	5554	168	1010	48	57	1	148	3	53	1	0	0	0	0	0	0	4	0
17:15:00	2481	144	5768	214	1091	81	58	1	152	4	53	0	0	0	0	0	0	0	4	0
17:30:00	2594	113	5966	198	1128	37	58	0	154	2	53	0	0	0	0	0	0	0	4	0
17:45:00	2712	118	6182	216	1159	31	62	4	161	7	55	2	0	0	0	0	0	0	4	0
18:00:00	2834	122	6412	230	1199	40	63	1	170	9	55	0	0	0	0	0	0	0	4	0
18:00:23	2834	0	6422	10	1201	2	63	0	170	0	55	0	0	0	0	0	0	0	4	0

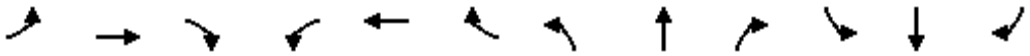
Appendix D

Synchro HCM Reports – Derry Road and Argentia Road



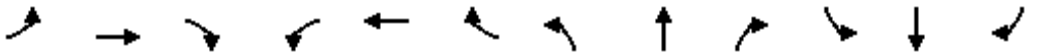
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	2201	471	261	678	216	72	139	110	325	481	43
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1657	5603	1543	1700	4856	1434	1767	1847	1420	1755	1951	
Flt Permitted	0.38	1.00	1.00	0.07	1.00	1.00	0.11	1.00	1.00	0.59	1.00	
Satd. Flow (perm)	667	5603	1543	120	4856	1434	209	1847	1420	1089	1951	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	55	2201	471	261	678	216	72	139	110	325	481	43
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	82	0	2	0
Lane Group Flow (vph)	55	2201	471	261	678	216	72	139	28	325	522	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	56.4	56.4	140.0	80.1	80.1	140.0	41.0	35.6	35.6	46.6	38.4	
Effective Green, g (s)	56.4	56.4	140.0	80.1	80.1	140.0	41.0	35.6	35.6	46.6	38.4	
Actuated g/C Ratio	0.40	0.40	1.00	0.57	0.57	1.00	0.29	0.25	0.25	0.33	0.27	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	269	2257	1543	302	2778	1434	121	470	361	401	535	
v/s Ratio Prot		c0.39		c0.13	0.14		0.02	0.08		c0.05	c0.27	
v/s Ratio Perm	0.08		0.31	0.36		0.15	0.15		0.02	0.22		
v/c Ratio	0.20	0.98	0.31	0.86	0.24	0.15	0.60	0.30	0.08	0.81	0.98	
Uniform Delay, d1	27.2	41.1	0.0	44.2	14.9	0.0	40.2	42.1	39.7	42.4	50.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	13.9	0.5	23.4	0.2	0.2	11.3	0.7	0.2	13.2	32.7	
Delay (s)	28.9	55.1	0.5	67.6	15.1	0.2	51.5	42.8	39.9	55.6	83.0	
Level of Service	C	E	A	E	B	A	D	D	D	E	F	
Approach Delay (s)		45.1			24.2			43.8			72.5	
Approach LOS		D			C			D			E	

Intersection Summary			
HCM Average Control Delay	44.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



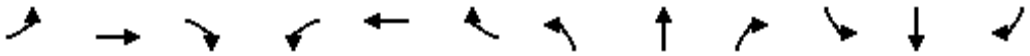
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	905	167	53	2300	421	309	521	314	273	232	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	1749	5193	1515	1785	1902	1547	2072	1800	
Flt Permitted	0.07	1.00	1.00	0.23	1.00	1.00	0.24	1.00	1.00	0.12	1.00	
Satd. Flow (perm)	129	4995	1477	418	5193	1515	449	1902	1547	271	1800	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	46	905	167	53	2300	421	309	521	314	273	232	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	114	0	14	0
Lane Group Flow (vph)	46	905	167	53	2300	421	309	521	200	273	337	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	58.4	58.4	140.0	68.0	68.0	140.0	58.9	42.1	42.1	48.7	34.9	
Effective Green, g (s)	58.4	58.4	140.0	68.0	68.0	140.0	58.9	42.1	42.1	48.7	34.9	
Actuated g/C Ratio	0.42	0.42	1.00	0.49	0.49	1.00	0.42	0.30	0.30	0.35	0.25	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2084	1477	266	2522	1515	389	572	465	272	449	
v/s Ratio Prot		0.18		0.01	c0.44		c0.12	0.27		c0.10	0.19	
v/s Ratio Perm	0.36		0.11	0.09		0.28	0.21		0.13	c0.25		
v/c Ratio	0.85	0.43	0.11	0.20	0.91	0.28	0.79	0.91	0.43	1.00	0.75	
Uniform Delay, d1	36.9	29.0	0.0	20.0	33.2	0.0	30.8	47.1	39.3	37.5	48.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	84.5	0.7	0.2	0.8	6.4	0.5	12.2	19.6	1.3	55.5	8.2	
Delay (s)	121.4	29.7	0.2	20.8	39.6	0.5	42.9	66.8	40.7	93.0	56.8	
Level of Service	F	C	A	C	D	A	D	E	D	F	E	
Approach Delay (s)		29.1			33.3			53.2			72.6	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM Average Control Delay	40.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



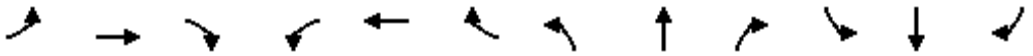
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1658	5603	1543	1700	4856	1434	1767	1847	1420	1757	1952	
Flt Permitted	0.36	1.00	1.00	0.06	1.00	1.00	0.12	1.00	1.00	0.54	1.00	
Satd. Flow (perm)	621	5603	1543	114	4856	1434	233	1847	1420	1006	1952	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	98	0	2	0
Lane Group Flow (vph)	61	2431	545	313	749	239	80	154	29	359	591	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	59.9	59.9	140.0	80.9	80.9	140.0	37.0	32.0	32.0	46.0	38.0	
Effective Green, g (s)	59.9	59.9	140.0	80.9	80.9	140.0	37.0	32.0	32.0	46.0	38.0	
Actuated g/C Ratio	0.43	0.43	1.00	0.58	0.58	1.00	0.26	0.23	0.23	0.33	0.27	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	266	2397	1543	270	2806	1434	116	422	325	390	530	
v/s Ratio Prot		0.43		c0.15	0.15		0.02	0.08		c0.07	c0.30	
v/s Ratio Perm	0.10		0.35	c0.52		0.17	0.16		0.02	0.23		
v/c Ratio	0.23	1.01	0.35	1.16	0.27	0.17	0.69	0.36	0.09	0.92	1.11	
Uniform Delay, d1	25.4	40.0	0.0	47.7	14.7	0.0	42.6	45.4	42.5	44.5	51.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	22.0	0.6	104.8	0.2	0.3	19.8	1.1	0.2	27.7	74.5	
Delay (s)	27.4	62.0	0.6	152.6	15.0	0.3	62.4	46.6	42.8	72.2	125.5	
Level of Service	C	E	A	F	B	A	E	D	D	E	F	
Approach Delay (s)		50.3			45.4			48.7			105.4	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM Average Control Delay	58.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	113.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



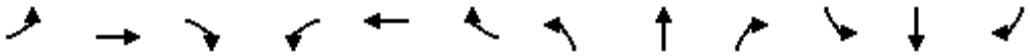
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	1749	5193	1515	1785	1902	1547	2072	1801	
Flt Permitted	0.07	1.00	1.00	0.20	1.00	1.00	0.19	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	128	4995	1477	360	5193	1515	357	1902	1547	243	1801	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	77	0	13	0
Lane Group Flow (vph)	51	1000	189	64	2541	465	346	581	285	302	379	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	58.5	58.5	140.0	65.5	65.5	140.0	61.4	43.4	43.4	50.9	35.9	
Effective Green, g (s)	58.5	58.5	140.0	65.5	65.5	140.0	61.4	43.4	43.4	50.9	35.9	
Actuated g/C Ratio	0.42	0.42	1.00	0.47	0.47	1.00	0.44	0.31	0.31	0.36	0.26	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	53	2087	1477	208	2430	1515	386	590	480	284	462	
v/s Ratio Prot		0.20		0.01	c0.49		c0.14	0.31		c0.11	0.21	
v/s Ratio Perm	0.40		0.13	0.14		0.31	0.25		0.18	c0.27		
v/c Ratio	0.96	0.48	0.13	0.31	1.05	0.31	0.90	0.98	0.59	1.06	0.82	
Uniform Delay, d1	39.7	29.7	0.0	21.9	37.2	0.0	30.8	48.0	40.9	40.8	49.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	113.1	0.8	0.2	1.8	31.6	0.5	23.7	33.1	3.0	71.1	12.5	
Delay (s)	152.8	30.5	0.2	23.6	68.8	0.5	54.5	81.1	43.8	112.0	61.5	
Level of Service	F	C	A	C	E	A	D	F	D	F	E	
Approach Delay (s)		30.9			57.5			63.5			83.4	
Approach LOS		C			E			E			F	

Intersection Summary			
HCM Average Control Delay	56.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	112.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



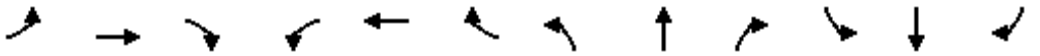
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1659	5603	1543	1700	4856	1434	1767	1847	1420	1758	1952	
Flt Permitted	0.33	1.00	1.00	0.06	1.00	1.00	0.12	1.00	1.00	0.51	1.00	
Satd. Flow (perm)	573	5603	1543	114	4856	1434	233	1847	1420	953	1952	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	107	0	2	0
Lane Group Flow (vph)	67	2686	600	343	827	264	88	170	32	397	652	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	59.9	59.9	140.0	78.9	78.9	140.0	37.0	32.0	32.0	48.0	40.0	
Effective Green, g (s)	59.9	59.9	140.0	78.9	78.9	140.0	37.0	32.0	32.0	48.0	40.0	
Actuated g/C Ratio	0.43	0.43	1.00	0.56	0.56	1.00	0.26	0.23	0.23	0.34	0.29	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	245	2397	1543	246	2737	1434	116	422	325	401	558	
v/s Ratio Prot		0.48		c0.16	0.17		0.03	0.09		c0.09	c0.33	
v/s Ratio Perm	0.12		0.39	c0.63		0.18	0.17		0.02	0.25		
v/c Ratio	0.27	1.12	0.39	1.39	0.30	0.18	0.76	0.40	0.10	0.99	1.17	
Uniform Delay, d1	26.0	40.0	0.0	47.2	16.1	0.0	44.4	45.9	42.6	44.6	50.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	60.5	0.7	200.4	0.3	0.3	28.3	1.3	0.3	42.3	93.8	
Delay (s)	28.7	100.6	0.7	247.6	16.4	0.3	72.7	47.2	42.9	86.9	143.8	
Level of Service	C	F	A	F	B	A	E	D	D	F	F	
Approach Delay (s)		81.3			68.7			51.3			122.3	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM Average Control Delay	83.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



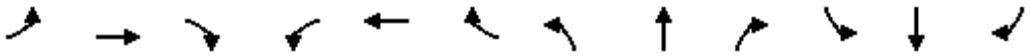
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.1	6.1	4.0	3.0	6.1	4.0	3.0	7.0	7.0	3.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	1750	5193	1515	1785	1902	1547	2072	1801	
Flt Permitted	0.07	1.00	1.00	0.17	1.00	1.00	0.11	1.00	1.00	0.12	1.00	
Satd. Flow (perm)	126	4995	1477	307	5193	1515	206	1902	1547	261	1801	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	68	0	13	0
Lane Group Flow (vph)	56	1104	209	70	2806	514	382	641	330	333	420	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	pm+pt		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free	8		8	4		
Actuated Green, G (s)	59.5	59.5	140.0	66.5	66.5	140.0	60.4	43.4	43.4	47.4	33.4	
Effective Green, g (s)	59.5	59.5	140.0	66.5	66.5	140.0	60.4	43.4	43.4	47.4	33.4	
Actuated g/C Ratio	0.42	0.42	1.00	0.48	0.48	1.00	0.43	0.31	0.31	0.34	0.24	
Clearance Time (s)	6.1	6.1		3.0	6.1		3.0	7.0	7.0	3.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2123	1477	187	2467	1515	360	590	480	269	430	
v/s Ratio Prot		0.22		0.01	c0.54		c0.18	0.34		c0.12	0.23	
v/s Ratio Perm	0.44		0.14	0.17		0.34	0.28		0.21	c0.29		
v/c Ratio	1.04	0.52	0.14	0.37	1.14	0.34	1.06	1.09	0.69	1.24	0.98	
Uniform Delay, d1	40.2	29.7	0.0	21.8	36.8	0.0	43.9	48.3	42.3	39.4	52.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	133.3	0.9	0.2	2.6	67.4	0.6	64.5	62.7	5.2	134.7	37.4	
Delay (s)	173.6	30.6	0.2	24.5	104.1	0.6	108.4	111.0	47.5	174.2	90.3	
Level of Service	F	C	A	C	F	A	F	F	D	F	F	
Approach Delay (s)		31.8			86.8			92.5			126.8	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	81.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.1
Intersection Capacity Utilization	121.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



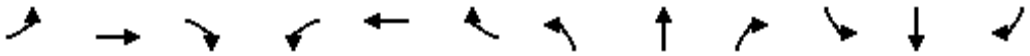
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.7	6.7	4.0	5.0	6.7	4.0	3.0	7.2	7.2	5.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1657	5603	1543	3298	4856	1434	1767	3510	1423	3429	3709	
Flt Permitted	0.36	1.00	1.00	0.95	1.00	1.00	0.30	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	620	5603	1543	3298	4856	1434	554	3510	1423	3429	3709	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	106	0	5	0
Lane Group Flow (vph)	61	2431	545	313	749	239	80	154	21	359	588	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8			
Actuated Green, G (s)	61.5	61.5	145.0	22.6	89.1	145.0	30.0	24.0	24.0	13.0	33.0	
Effective Green, g (s)	61.5	61.5	145.0	22.6	89.1	145.0	30.0	24.0	24.0	13.0	33.0	
Actuated g/C Ratio	0.42	0.42	1.00	0.16	0.61	1.00	0.21	0.17	0.17	0.09	0.23	
Clearance Time (s)	6.7	6.7		5.0	6.7		3.0	7.2	7.2	5.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	263	2376	1543	514	2984	1434	165	581	236	307	844	
v/s Ratio Prot		c0.43		c0.09	0.15		0.02	0.04		c0.10	c0.16	
v/s Ratio Perm	0.10		0.35			0.17	0.08		0.01			
v/c Ratio	0.23	1.02	0.35	0.61	0.25	0.17	0.48	0.27	0.09	1.17	0.70	
Uniform Delay, d1	26.7	41.8	0.0	57.1	12.7	0.0	48.0	52.8	51.2	66.0	51.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	24.6	0.6	3.0	0.2	0.3	4.6	0.5	0.3	105.5	3.2	
Delay (s)	28.7	66.3	0.6	60.1	12.9	0.3	52.6	53.3	51.6	171.5	54.6	
Level of Service	C	E	A	E	B	A	D	D	D	F	D	
Approach Delay (s)		53.8			22.0			52.5			98.7	
Approach LOS		D			C			D			F	

Intersection Summary			
HCM Average Control Delay	53.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.7
Intersection Capacity Utilization	97.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



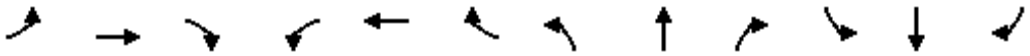
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.7	6.7	4.0	5.0	6.7	4.0	3.0	7.2	7.2	5.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	3395	5193	1515	1785	3614	1547	4020	3422	
Flt Permitted	0.06	1.00	1.00	0.95	1.00	1.00	0.39	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	112	4995	1477	3395	5193	1515	726	3614	1547	4020	3422	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	70	0	20	0
Lane Group Flow (vph)	51	1000	189	64	2541	465	346	581	292	302	372	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8			
Actuated Green, G (s)	66.9	66.9	145.0	6.1	78.0	145.0	52.3	36.3	36.3	11.8	34.1	
Effective Green, g (s)	66.9	66.9	145.0	6.1	78.0	145.0	52.3	36.3	36.3	11.8	34.1	
Actuated g/C Ratio	0.46	0.46	1.00	0.04	0.54	1.00	0.36	0.25	0.25	0.08	0.24	
Clearance Time (s)	6.7	6.7		5.0	6.7		3.0	7.2	7.2	5.0	7.2	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	52	2305	1477	143	2793	1515	379	905	387	327	805	
v/s Ratio Prot		0.20		0.02	c0.49		c0.10	0.16		0.08	0.11	
v/s Ratio Perm	c0.45		0.13			0.31	c0.23		0.19			
v/c Ratio	0.98	0.43	0.13	0.45	0.91	0.31	0.91	0.64	0.76	0.92	0.46	
Uniform Delay, d1	38.4	26.3	0.0	67.8	30.3	0.0	40.6	48.5	50.2	66.2	47.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	119.4	0.6	0.2	2.2	5.7	0.5	26.9	2.1	9.6	31.8	0.9	
Delay (s)	157.8	26.9	0.2	70.0	36.0	0.5	67.4	50.7	59.9	97.9	48.5	
Level of Service	F	C	A	E	D	A	E	D	E	F	D	
Approach Delay (s)		28.2			31.3			57.8			70.0	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM Average Control Delay	40.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



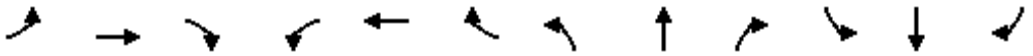
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.7	6.7	4.0	5.0	6.7	4.0	3.0	7.2	7.2	5.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1659	5603	1543	3298	4856	1434	1767	3510	1423	3429	3709	
Flt Permitted	0.33	1.00	1.00	0.95	1.00	1.00	0.25	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	573	5603	1543	3298	4856	1434	471	3510	1423	3429	3709	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	114	0	5	0
Lane Group Flow (vph)	67	2686	600	343	827	264	88	170	25	397	649	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8			
Actuated Green, G (s)	58.1	58.1	145.0	23.8	86.9	145.0	32.2	26.2	26.2	13.0	35.2	
Effective Green, g (s)	58.1	58.1	145.0	23.8	86.9	145.0	32.2	26.2	26.2	13.0	35.2	
Actuated g/C Ratio	0.40	0.40	1.00	0.16	0.60	1.00	0.22	0.18	0.18	0.09	0.24	
Clearance Time (s)	6.7	6.7		5.0	6.7		3.0	7.2	7.2	5.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	230	2245	1543	541	2910	1434	158	634	257	307	900	
v/s Ratio Prot		c0.48		c0.10	0.17		0.02	0.05		c0.12	c0.17	
v/s Ratio Perm	0.12		0.39			0.18	0.10		0.02			
v/c Ratio	0.29	1.20	0.39	0.63	0.28	0.18	0.56	0.27	0.10	1.29	0.72	
Uniform Delay, d1	29.5	43.5	0.0	56.5	14.0	0.0	46.5	51.1	49.5	66.0	50.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.2	93.0	0.7	3.4	0.2	0.3	7.1	0.5	0.3	154.1	3.5	
Delay (s)	32.7	136.5	0.7	59.9	14.3	0.3	53.6	51.6	49.9	220.1	53.9	
Level of Service	C	F	A	E	B	A	D	D	D	F	D	
Approach Delay (s)		110.1			22.6			51.5			116.7	
Approach LOS		F			C			D			F	

Intersection Summary			
HCM Average Control Delay	87.4	HCM Level of Service	F
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.7
Intersection Capacity Utilization	104.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



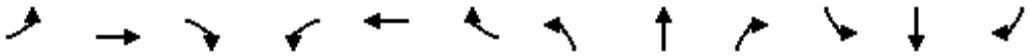
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.7	6.7	4.0	5.0	6.7	4.0	3.0	7.2	7.2	5.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	3395	5193	1515	1785	3614	1547	4020	3421	
Flt Permitted	0.06	1.00	1.00	0.95	1.00	1.00	0.40	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	117	4995	1477	3395	5193	1515	753	3614	1547	4020	3421	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	72	0	13	0
Lane Group Flow (vph)	56	1104	209	70	2806	514	382	641	326	333	420	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8			
Actuated Green, G (s)	64.3	64.3	140.0	4.6	73.9	140.0	48.4	35.4	35.4	11.8	36.2	
Effective Green, g (s)	64.3	64.3	140.0	4.6	73.9	140.0	48.4	35.4	35.4	11.8	36.2	
Actuated g/C Ratio	0.46	0.46	1.00	0.03	0.53	1.00	0.35	0.25	0.25	0.08	0.26	
Clearance Time (s)	6.7	6.7		5.0	6.7		3.0	7.2	7.2	5.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2294	1477	112	2741	1515	356	914	391	339	885	
v/s Ratio Prot		0.22		0.02	c0.54		c0.10	0.18		0.08	0.12	
v/s Ratio Perm	0.48		0.14			c0.34	c0.27		0.21			
v/c Ratio	1.04	0.48	0.14	0.62	1.02	0.34	1.07	0.70	0.83	0.98	0.47	
Uniform Delay, d1	37.9	26.3	0.0	66.8	33.0	0.0	42.9	47.5	49.5	64.0	43.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	133.3	0.7	0.2	14.4	23.5	0.6	68.5	3.1	15.6	44.1	0.8	
Delay (s)	171.2	27.0	0.2	81.3	56.6	0.6	111.4	50.6	65.2	108.1	44.7	
Level of Service	F	C	A	F	E	A	F	D	E	F	D	
Approach Delay (s)		28.8			48.6			71.0			72.3	
Approach LOS		C			D			E			E	

Intersection Summary			
HCM Average Control Delay	51.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.7
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



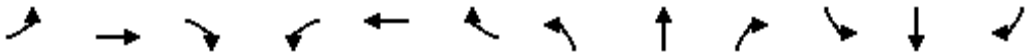
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	3.0	6.6	4.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.95		0.97	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1657	5603	1543	1700	4856	1434	3429	3219		3429	1952	
Flt Permitted	0.36	1.00	1.00	0.07	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	620	5603	1543	119	4856	1434	3429	3219		3429	1952	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
RTOR Reduction (vph)	0	0	0	0	0	0	0	94	0	0	2	0
Lane Group Flow (vph)	61	2431	545	313	749	239	80	187	0	359	591	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	pm+pt		Free	Prot			Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free						
Actuated Green, G (s)	57.2	57.2	145.0	76.3	76.3	145.0	5.0	38.1		12.0	45.1	
Effective Green, g (s)	57.2	57.2	145.0	76.3	76.3	145.0	5.0	38.1		12.0	45.1	
Actuated g/C Ratio	0.39	0.39	1.00	0.53	0.53	1.00	0.03	0.26		0.08	0.31	
Clearance Time (s)	6.6	6.6		3.0	6.6		5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	245	2210	1543	238	2555	1434	118	846		284	607	
v/s Ratio Prot		0.43		c0.15	0.15		0.02	0.06		c0.10	c0.30	
v/s Ratio Perm	0.10		0.35	c0.55		0.17						
v/c Ratio	0.25	1.10	0.35	1.32	0.29	0.17	0.68	0.22		1.26	0.97	
Uniform Delay, d1	29.5	43.9	0.0	48.1	19.2	0.0	69.2	41.8		66.5	49.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	52.7	0.6	168.4	0.3	0.3	18.4	0.3		143.9	30.0	
Delay (s)	31.9	96.6	0.6	216.5	19.5	0.3	87.6	42.1		210.4	79.4	
Level of Service	C	F	A	F	B	A	F	D		F	E	
Approach Delay (s)		78.0			63.4			52.2			128.8	
Approach LOS		E			E			D			F	

Intersection Summary			
HCM Average Control Delay	81.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	114.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



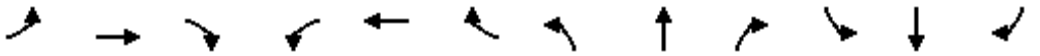
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.95		0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	1749	5193	1515	3463	3393		4020	1801	
Flt Permitted	0.06	1.00	1.00	0.20	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	117	4995	1477	365	5193	1515	3463	3393		4020	1801	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
RTOR Reduction (vph)	0	0	0	0	0	0	0	66	0	0	3	0
Lane Group Flow (vph)	51	1000	189	64	2541	465	346	877	0	302	389	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	pm+pt		Free	Prot			Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free						
Actuated Green, G (s)	64.0	64.0	145.0	72.2	72.2	145.0	17.0	42.4		11.8	37.2	
Effective Green, g (s)	64.0	64.0	145.0	72.2	72.2	145.0	17.0	42.4		11.8	37.2	
Actuated g/C Ratio	0.44	0.44	1.00	0.50	0.50	1.00	0.12	0.29		0.08	0.26	
Clearance Time (s)	6.6	6.6		5.0	6.6		5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	52	2205	1477	212	2586	1515	406	992		327	462	
v/s Ratio Prot		0.20		0.01	c0.49		c0.10	c0.26		0.08	0.22	
v/s Ratio Perm	0.43		0.13	0.14		0.31						
v/c Ratio	0.98	0.45	0.13	0.30	0.98	0.31	0.85	0.88		0.92	0.84	
Uniform Delay, d1	39.9	28.3	0.0	20.4	35.8	0.0	62.8	49.0		66.2	51.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	119.4	0.7	0.2	0.8	14.1	0.5	17.1	10.2		31.8	14.3	
Delay (s)	159.2	29.0	0.2	21.2	49.8	0.5	79.9	59.1		97.9	65.4	
Level of Service	F	C	A	C	D	A	E	E		F	E	
Approach Delay (s)		29.9			41.8			64.7			79.6	
Approach LOS		C			D			E			E	

Intersection Summary			
HCM Average Control Delay	48.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	18.6
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



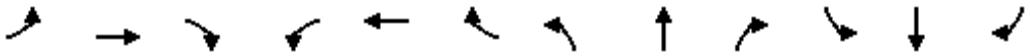
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	3.0	6.6	4.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.95		0.97	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1659	5603	1543	1700	4856	1434	3429	3220		3429	1952	
Flt Permitted	0.33	1.00	1.00	0.07	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	573	5603	1543	119	4856	1434	3429	3220		3429	1952	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
RTOR Reduction (vph)	0	0	0	0	0	0	0	102	0	0	2	0
Lane Group Flow (vph)	67	2686	600	343	827	264	88	207	0	397	652	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	pm+pt		Free	Prot			Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free						
Actuated Green, G (s)	57.2	57.2	145.0	76.2	76.2	145.0	5.0	38.2		12.0	45.2	
Effective Green, g (s)	57.2	57.2	145.0	76.2	76.2	145.0	5.0	38.2		12.0	45.2	
Actuated g/C Ratio	0.39	0.39	1.00	0.53	0.53	1.00	0.03	0.26		0.08	0.31	
Clearance Time (s)	6.6	6.6		3.0	6.6		5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	226	2210	1543	237	2552	1434	118	848		284	608	
v/s Ratio Prot		0.48		c0.16	0.17		0.03	0.06		c0.12	c0.33	
v/s Ratio Perm	0.12		0.39	c0.60		0.18						
v/c Ratio	0.30	1.22	0.39	1.45	0.32	0.18	0.75	0.24		1.40	1.07	
Uniform Delay, d1	30.1	43.9	0.0	48.1	19.7	0.0	69.4	42.0		66.5	49.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.3	101.3	0.7	223.4	0.3	0.3	26.2	0.3		199.1	57.4	
Delay (s)	33.4	145.2	0.7	271.5	20.0	0.3	95.6	42.4		265.6	107.3	
Level of Service	C	F	A	F	C	A	F	D		F	F	
Approach Delay (s)		117.1			76.5			54.2			167.1	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM Average Control Delay	112.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



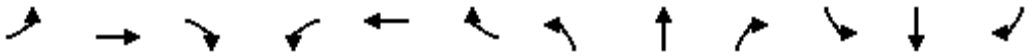
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	3.0	6.6	4.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.95		0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	1750	5193	1515	3463	3393		4020	1801	
Flt Permitted	0.06	1.00	1.00	0.18	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	106	4995	1477	334	5193	1515	3463	3393		4020	1801	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
RTOR Reduction (vph)	0	0	0	0	0	0	0	64	0	0	1	0
Lane Group Flow (vph)	56	1104	209	70	2806	514	382	975	0	333	432	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	pm+pt		Free	Prot			Prot		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free						
Actuated Green, G (s)	70.6	70.6	150.0	79.2	79.2	150.0	14.0	40.0		12.2	38.2	
Effective Green, g (s)	70.6	70.6	150.0	79.2	79.2	150.0	14.0	40.0		12.2	38.2	
Actuated g/C Ratio	0.47	0.47	1.00	0.53	0.53	1.00	0.09	0.27		0.08	0.25	
Clearance Time (s)	6.6	6.6		3.0	6.6		5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	50	2351	1477	229	2742	1515	323	905		327	459	
v/s Ratio Prot		0.22		0.01	c0.54		c0.11	c0.29		0.08	0.24	
v/s Ratio Perm	c0.53		0.14	0.15		c0.34						
v/c Ratio	1.12	0.47	0.14	0.31	1.02	0.34	1.18	1.08		1.02	0.94	
Uniform Delay, d1	39.7	27.0	0.0	18.9	35.4	0.0	68.0	55.0		68.9	54.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	164.4	0.7	0.2	1.6	23.4	0.6	109.3	53.1		54.5	28.5	
Delay (s)	204.1	27.7	0.2	20.5	58.8	0.6	177.3	108.1		123.4	83.3	
Level of Service	F	C	A	C	E	A	F	F		F	F	
Approach Delay (s)		30.7			49.2			126.7			100.8	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	67.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	112.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



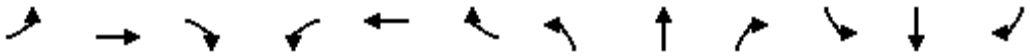
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	2201	471	261	678	216	72	139	110	325	481	43
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1657	5603	1543	3298	4856	1434	1767	3510	1424	1757	3707	
Flt Permitted	0.38	1.00	1.00	0.95	1.00	1.00	0.30	1.00	1.00	0.59	1.00	
Satd. Flow (perm)	667	5603	1543	3298	4856	1434	563	3510	1424	1096	3707	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	55	2201	471	261	678	216	72	139	110	325	481	43
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	90	0	6	0
Lane Group Flow (vph)	55	2201	471	261	678	216	72	139	20	325	518	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	66.8	66.8	140.0	18.1	89.9	140.0	28.9	24.9	24.9	36.3	29.3	
Effective Green, g (s)	66.8	66.8	140.0	18.1	89.9	140.0	28.9	24.9	24.9	36.3	29.3	
Actuated g/C Ratio	0.48	0.48	1.00	0.13	0.64	1.00	0.21	0.18	0.18	0.26	0.21	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	318	2673	1543	426	3118	1434	151	624	253	324	776	
v/s Ratio Prot		c0.39		c0.08	0.14		0.01	0.04		c0.06	0.14	
v/s Ratio Perm	0.08		0.31			0.15	0.08		0.01	c0.20		
v/c Ratio	0.17	0.82	0.31	0.61	0.22	0.15	0.48	0.22	0.08	1.00	0.67	
Uniform Delay, d1	20.9	31.5	0.0	57.6	10.4	0.0	47.4	49.3	48.0	51.2	50.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	3.0	0.5	3.7	0.2	0.2	4.9	0.4	0.3	50.8	2.9	
Delay (s)	22.0	34.5	0.5	61.4	10.6	0.2	52.3	49.6	48.2	101.9	53.8	
Level of Service	C	C	A	E	B	A	D	D	D	F	D	
Approach Delay (s)		28.4			20.1			49.8			72.2	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM Average Control Delay	35.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



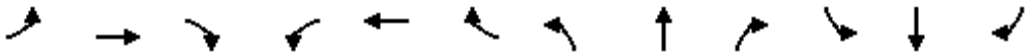
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	905	167	53	2300	421	309	521	314	273	232	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	3395	5193	1515	1785	3614	1547	2072	3419	
Flt Permitted	0.06	1.00	1.00	0.95	1.00	1.00	0.39	1.00	1.00	0.30	1.00	
Satd. Flow (perm)	114	4995	1477	3395	5193	1515	727	3614	1547	663	3419	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	46	905	167	53	2300	421	309	521	314	273	232	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	113	0	35	0
Lane Group Flow (vph)	46	905	167	53	2300	421	309	521	201	273	316	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	66.0	66.0	140.0	7.4	78.4	140.0	47.8	30.6	30.6	41.6	27.4	
Effective Green, g (s)	66.0	66.0	140.0	7.4	78.4	140.0	47.8	30.6	30.6	41.6	27.4	
Actuated g/C Ratio	0.47	0.47	1.00	0.05	0.56	1.00	0.34	0.22	0.22	0.30	0.20	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2355	1477	179	2908	1515	380	790	338	340	669	
v/s Ratio Prot		0.18		0.02	c0.44		c0.10	0.14		0.08	0.09	
v/s Ratio Perm	c0.40		0.11			0.28	c0.18		0.13	0.16		
v/c Ratio	0.85	0.38	0.11	0.30	0.79	0.28	0.81	0.66	0.60	0.80	0.47	
Uniform Delay, d1	32.7	23.9	0.0	63.8	24.3	0.0	38.0	49.9	49.1	40.7	49.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	84.5	0.5	0.2	1.9	2.3	0.5	14.0	2.7	4.2	14.5	1.1	
Delay (s)	117.2	24.4	0.2	65.7	26.6	0.5	52.0	52.6	53.4	55.2	51.0	
Level of Service	F	C	A	E	C	A	D	D	D	E	D	
Approach Delay (s)		24.6			23.4			52.7			52.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	32.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



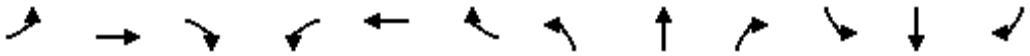
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1657	5603	1543	3298	4856	1434	1767	3510	1422	1756	3709	
Flt Permitted	0.36	1.00	1.00	0.95	1.00	1.00	0.21	1.00	1.00	0.61	1.00	
Satd. Flow (perm)	620	5603	1543	3298	4856	1434	383	3510	1422	1134	3709	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	61	2431	545	313	749	239	80	154	127	359	546	47
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	102	0	5	0
Lane Group Flow (vph)	61	2431	545	313	749	239	80	154	25	359	588	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	67.2	67.2	150.0	20.2	92.4	150.0	38.8	30.0	30.0	42.8	32.0	
Effective Green, g (s)	67.2	67.2	150.0	20.2	92.4	150.0	38.8	30.0	30.0	42.8	32.0	
Actuated g/C Ratio	0.45	0.45	1.00	0.13	0.62	1.00	0.26	0.20	0.20	0.29	0.21	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	278	2510	1543	444	2991	1434	180	702	284	368	791	
v/s Ratio Prot		c0.43		c0.09	0.15		0.03	0.04		c0.07	0.16	
v/s Ratio Perm	0.10		0.35			0.17	0.09		0.02	c0.21		
v/c Ratio	0.22	0.97	0.35	0.70	0.25	0.17	0.44	0.22	0.09	0.98	0.74	
Uniform Delay, d1	25.3	40.4	0.0	62.1	13.1	0.0	44.1	50.2	48.9	51.7	55.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	12.0	0.6	6.3	0.2	0.3	3.6	0.3	0.3	40.5	4.6	
Delay (s)	27.2	52.3	0.6	68.3	13.3	0.3	47.7	50.5	49.2	92.2	59.7	
Level of Service	C	D	A	E	B	A	D	D	D	F	E	
Approach Delay (s)		42.5			24.1			49.4			72.0	
Approach LOS		D			C			D			E	

Intersection Summary			
HCM Average Control Delay	43.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.6
Intersection Capacity Utilization	106.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



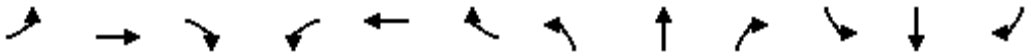
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	3395	5193	1515	1785	3614	1547	2072	3422	
Flt Permitted	0.06	1.00	1.00	0.95	1.00	1.00	0.39	1.00	1.00	0.27	1.00	
Satd. Flow (perm)	117	4995	1477	3395	5193	1515	729	3614	1547	595	3422	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1000	189	64	2541	465	346	581	362	302	261	131
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	84	0	26	0
Lane Group Flow (vph)	51	1000	189	64	2541	465	346	581	278	302	366	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	64.3	64.3	140.0	5.2	74.5	140.0	50.9	34.9	34.9	46.5	32.7	
Effective Green, g (s)	64.3	64.3	140.0	5.2	74.5	140.0	50.9	34.9	34.9	46.5	32.7	
Actuated g/C Ratio	0.46	0.46	1.00	0.04	0.53	1.00	0.36	0.25	0.25	0.33	0.23	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2294	1477	126	2763	1515	386	901	386	343	799	
v/s Ratio Prot		0.20		0.02	c0.49		c0.10	0.16		0.09	0.11	
v/s Ratio Perm	0.44		0.13			0.31	c0.22		0.18	0.21		
v/c Ratio	0.94	0.44	0.13	0.51	0.92	0.31	0.90	0.64	0.72	0.88	0.46	
Uniform Delay, d1	36.1	25.6	0.0	66.1	30.0	0.0	38.4	47.0	48.1	39.1	46.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	107.2	0.6	0.2	3.2	6.3	0.5	23.7	2.2	7.9	23.6	0.9	
Delay (s)	143.3	26.2	0.2	69.3	36.4	0.5	62.1	49.2	56.0	62.6	46.9	
Level of Service	F	C	A	E	D	A	E	D	E	E	D	
Approach Delay (s)		27.0			31.6			54.6			53.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	37.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.6
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
Ideal Flow (vphpl)	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900	1975	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1659	5603	1543	3298	4856	1434	1767	3510	1423	1756	3709	
Flt Permitted	0.33	1.00	1.00	0.95	1.00	1.00	0.18	1.00	1.00	0.63	1.00	
Satd. Flow (perm)	573	5603	1543	3298	4856	1434	327	3510	1423	1155	3709	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	67	2686	600	343	827	264	88	170	139	397	602	52
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	108	0	5	0
Lane Group Flow (vph)	67	2686	600	343	827	264	88	170	31	397	649	0
Confl. Peds. (#/hr)	13					13			12	12		
Heavy Vehicles (%)	7%	1%	1%	5%	8%	7%	1%	4%	5%	1%	1%	2%
Bus Blockages (#/hr)	0	0	6	0	0	6	0	0	10	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	65.2	65.2	145.0	17.7	87.9	145.0	39.3	32.3	32.3	41.3	33.3	
Effective Green, g (s)	65.2	65.2	145.0	17.7	87.9	145.0	39.3	32.3	32.3	41.3	33.3	
Actuated g/C Ratio	0.45	0.45	1.00	0.12	0.61	1.00	0.27	0.22	0.22	0.28	0.23	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	258	2519	1543	403	2944	1434	158	782	317	362	852	
v/s Ratio Prot		c0.48		c0.10	0.17		0.03	0.05		c0.06	0.18	
v/s Ratio Perm	0.12		0.39			0.18	0.12		0.02	c0.25		
v/c Ratio	0.26	1.07	0.39	0.85	0.28	0.18	0.56	0.22	0.10	1.10	0.76	
Uniform Delay, d1	24.9	39.9	0.0	62.4	13.6	0.0	41.8	46.0	44.8	50.7	52.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.4	38.7	0.7	17.1	0.2	0.3	7.1	0.3	0.3	75.9	4.8	
Delay (s)	27.3	78.6	0.7	79.4	13.8	0.3	48.9	46.3	45.1	126.5	56.9	
Level of Service	C	E	A	E	B	A	D	D	D	F	E	
Approach Delay (s)		63.6			27.0			46.4			83.2	
Approach LOS		E			C			D			F	

Intersection Summary			
HCM Average Control Delay	57.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	17.6
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

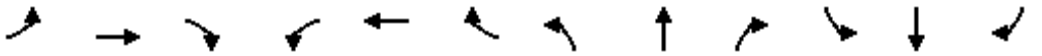


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2250	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.7
Total Lost time (s)	6.6	6.6	4.0	5.0	6.6	4.0	3.0	7.2	7.2	3.0	7.2	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1785	4995	1477	3395	5193	1515	1785	3614	1547	2072	3421	
Flt Permitted	0.07	1.00	1.00	0.95	1.00	1.00	0.40	1.00	1.00	0.21	1.00	
Satd. Flow (perm)	122	4995	1477	3395	5193	1515	750	3614	1547	449	3421	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	56	1104	209	70	2806	514	382	641	398	333	288	145
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	83	0	20	0
Lane Group Flow (vph)	56	1104	209	70	2806	514	382	641	315	333	413	0
Confl. Peds. (#/hr)	2		8	8		2						
Heavy Vehicles (%)	0%	5%	4%	2%	1%	2%	0%	1%	2%	2%	2%	0%
Bus Blockages (#/hr)	0	0	6	0	0	5	0	0	3	0	0	0
Turn Type	Perm		Free	Prot		Free	pm+pt		Perm	pm+pt		
Protected Phases		2		1	6		3	8		7	4	
Permitted Phases	2		Free			Free	8		8	4		
Actuated Green, G (s)	61.4	61.4	140.0	4.9	71.3	140.0	51.1	35.1	35.1	52.7	35.9	
Effective Green, g (s)	61.4	61.4	140.0	4.9	71.3	140.0	51.1	35.1	35.1	52.7	35.9	
Actuated g/C Ratio	0.44	0.44	1.00	0.04	0.51	1.00	0.37	0.25	0.25	0.38	0.26	
Clearance Time (s)	6.6	6.6		5.0	6.6		3.0	7.2	7.2	3.0	7.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Grp Cap (vph)	54	2191	1477	119	2645	1515	392	906	388	364	877	
v/s Ratio Prot		0.22		0.02	c0.54		c0.11	0.18		c0.11	0.12	
v/s Ratio Perm	0.46		0.14			0.34	c0.24		0.20	0.23		
v/c Ratio	1.04	0.50	0.14	0.59	1.06	0.34	0.97	0.71	0.81	0.91	0.47	
Uniform Delay, d1	39.3	28.3	0.0	66.6	34.4	0.0	40.1	47.8	49.3	34.2	44.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	133.3	0.8	0.2	11.0	36.3	0.6	38.8	3.2	13.6	28.0	0.8	
Delay (s)	172.6	29.2	0.2	77.6	70.7	0.6	79.0	51.0	63.0	62.2	44.9	
Level of Service	F	C	A	E	E	A	E	D	E	E	D	
Approach Delay (s)		30.6			60.2			61.8			52.4	
Approach LOS		C			E			E			D	

Intersection Summary			
HCM Average Control Delay	53.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Appendix E

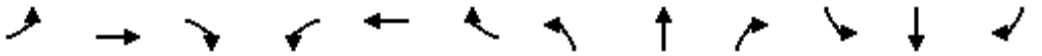
Synchro HCM Reports – Study Area Intersections



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	357	28	169	338	275	127	2446	455	726	1297	500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2150	1900	2100	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	7.8	7.8	4.0	3.0	7.8	4.0	6.5	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1607	3510	1293	1705	3510	1461	1782	5762	1541	3716	4902	1547
Flt Permitted	0.55	1.00	1.00	0.35	1.00	1.00	0.20	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	927	3510	1293	623	3510	1461	377	5762	1541	3716	4902	1547
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	75	357	28	169	338	275	127	2446	455	726	1297	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	75	357	28	169	338	275	127	2446	455	726	1297	500
Confl. Peds. (#/hr)	1		28	28		1	3		13	13		3
Heavy Vehicles (%)	11%	4%	21%	4%	4%	8%	0%	3%	2%	3%	7%	1%
Turn Type	Perm		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	22.7	22.7	142.2	33.9	33.9	142.2	60.7	60.7	142.2	28.3	94.0	142.2
Effective Green, g (s)	22.7	22.7	142.2	33.9	33.9	142.2	60.7	60.7	142.2	28.3	94.0	142.2
Actuated g/C Ratio	0.16	0.16	1.00	0.24	0.24	1.00	0.43	0.43	1.00	0.20	0.66	1.00
Clearance Time (s)	7.8	7.8		3.0	7.8		6.5	6.5		5.0	6.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	148	560	1293	211	837	1461	161	2460	1541	740	3240	1547
v/s Ratio Prot		0.10		c0.05	0.10			c0.42		c0.20	0.26	
v/s Ratio Perm	0.08		0.02	c0.14		0.19	0.34		0.30			0.32
v/c Ratio	0.51	0.64	0.02	0.80	0.40	0.19	0.79	0.99	0.30	0.98	0.40	0.32
Uniform Delay, d1	54.6	55.9	0.0	49.2	45.6	0.0	35.2	40.6	0.0	56.7	11.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	3.3	0.0	21.6	0.7	0.3	31.4	16.9	0.5	28.5	0.4	0.6
Delay (s)	60.2	59.2	0.0	70.8	46.3	0.3	66.6	57.4	0.5	85.1	11.5	0.6
Level of Service	E	E	A	E	D	A	E	E	A	F	B	A
Approach Delay (s)		55.8			35.4			49.3			30.5	
Approach LOS		E			D			D			C	

Intersection Summary					
HCM Average Control Delay	41.1	HCM Level of Service	D		
HCM Volume to Capacity ratio	0.90				
Actuated Cycle Length (s)	142.2	Sum of lost time (s)	14.5		
Intersection Capacity Utilization	107.3%	ICU Level of Service	G		
Analysis Period (min)	15				

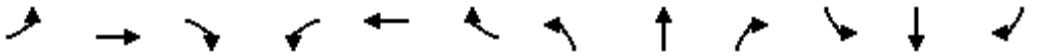
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	369	212	89	468	409	1147	42	1629	134	246	2032	64
Ideal Flow (vphpl)	1900	1900	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.8	4.0	3.0	7.8	4.0	3.0	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1748	3544	1566	1907	3544	1545	1785	5043	1575	3267	5092	1507
Flt Permitted	0.30	1.00	1.00	0.62	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	550	3544	1566	1242	3544	1545	139	5043	1575	3267	5092	1507
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	369	212	89	468	409	1147	42	1629	134	246	2032	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	369	212	89	468	409	1147	42	1629	134	246	2032	64
Confl. Peds. (#/hr)	5					5			6	6		
Heavy Vehicles (%)	2%	3%	2%	1%	3%	2%	0%	4%	0%	6%	3%	6%
Turn Type	pm+pt		Free	pm+pt		Free	pm+pt		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	49.8	27.4	140.0	42.9	23.5	140.0	59.9	54.0	140.0	16.9	67.0	140.0
Effective Green, g (s)	49.8	27.4	140.0	42.9	23.5	140.0	59.9	54.0	140.0	16.9	67.0	140.0
Actuated g/C Ratio	0.36	0.20	1.00	0.31	0.17	1.00	0.43	0.39	1.00	0.12	0.48	1.00
Clearance Time (s)	3.0	7.8		3.0	7.8		3.0	6.5		5.0	6.5	
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	395	694	1566	473	595	1545	129	1945	1575	394	2437	1507
v/s Ratio Prot	c0.16	0.06		c0.14	0.12		0.01	0.32		0.08	c0.40	
v/s Ratio Perm	c0.18		0.06	0.17		c0.74	0.13		0.09			0.04
v/c Ratio	0.93	0.31	0.06	0.99	0.69	0.74	0.33	0.84	0.09	0.62	0.83	0.04
Uniform Delay, d1	38.0	48.2	0.0	46.0	54.8	0.0	27.6	39.0	0.0	58.5	31.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	29.0	0.5	0.1	38.4	4.2	3.3	1.5	4.5	0.1	4.3	3.5	0.1
Delay (s)	67.0	48.7	0.1	84.5	59.0	3.3	29.1	43.5	0.1	62.9	35.2	0.1
Level of Service	E	D	A	F	E	A	C	D	A	E	D	A
Approach Delay (s)		52.3			33.3			40.0			37.2	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	38.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	3.0
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		

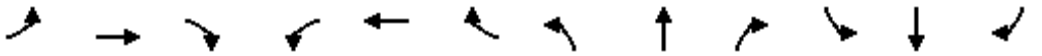
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	394	31	187	373	304	140	2702	503	802	1433	552
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2150	1900	2100	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	7.8	7.8	4.0	3.0	7.8	4.0	6.5	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1607	3510	1293	1707	3510	1461	1782	5762	1541	3716	4902	1547
Flt Permitted	0.53	1.00	1.00	0.32	1.00	1.00	0.17	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	896	3510	1293	570	3510	1461	327	5762	1541	3716	4902	1547
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	83	394	31	187	373	304	140	2702	503	802	1433	552
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	83	394	31	187	373	304	140	2702	503	802	1433	552
Confl. Peds. (#/hr)	1		28	28		1	3		13	13		3
Heavy Vehicles (%)	11%	4%	21%	4%	4%	8%	0%	3%	2%	3%	7%	1%
Turn Type	Perm		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	23.6	23.6	140.0	31.6	31.6	140.0	59.7	59.7	140.0	29.4	94.1	140.0
Effective Green, g (s)	23.6	23.6	140.0	31.6	31.6	140.0	59.7	59.7	140.0	29.4	94.1	140.0
Actuated g/C Ratio	0.17	0.17	1.00	0.23	0.23	1.00	0.43	0.43	1.00	0.21	0.67	1.00
Clearance Time (s)	7.8	7.8		3.0	7.8		6.5	6.5		5.0	6.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	151	592	1293	169	792	1461	139	2457	1541	780	3295	1547
v/s Ratio Prot		0.11		c0.04	0.11			c0.47		c0.22	0.29	
v/s Ratio Perm	0.09		0.02	c0.21		0.21	0.43		0.33			0.36
v/c Ratio	0.55	0.67	0.02	1.11	0.47	0.21	1.01	1.10	0.33	1.03	0.43	0.36
Uniform Delay, d1	53.3	54.5	0.0	54.3	47.0	0.0	40.1	40.1	0.0	55.3	10.6	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.0	3.7	0.0	100.6	0.9	0.3	78.2	51.9	0.6	39.6	0.4	0.6
Delay (s)	60.4	58.2	0.0	154.9	47.9	0.3	118.4	92.0	0.6	94.9	11.1	0.6
Level of Service	E	E	A	F	D	A	F	F	A	F	B	A
Approach Delay (s)		55.0			54.3			79.4			33.1	
Approach LOS		E			D			E			C	

Intersection Summary			
HCM Average Control Delay	57.7	HCM Level of Service	E
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		

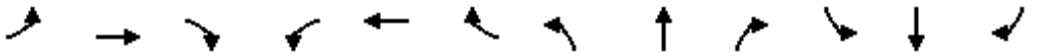
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	234	98	517	452	1267	46	1799	148	272	2245	71
Ideal Flow (vphpl)	1900	1900	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.8	4.0	3.0	7.8	4.0	3.0	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1749	3544	1566	1907	3544	1545	1785	5043	1575	3267	5092	1507
Flt Permitted	0.29	1.00	1.00	0.61	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	525	3544	1566	1216	3544	1545	131	5043	1575	3267	5092	1507
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	408	234	98	517	452	1267	46	1799	148	272	2245	71
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	408	234	98	517	452	1267	46	1799	148	272	2245	71
Confl. Peds. (#/hr)	5					5			6	6		
Heavy Vehicles (%)	2%	3%	2%	1%	3%	2%	0%	4%	0%	6%	3%	6%
Turn Type	pm+pt		Free	pm+pt		Free	pm+pt		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	46.7	25.7	140.0	44.7	24.7	140.0	62.0	57.3	140.0	14.7	69.3	140.0
Effective Green, g (s)	46.7	25.7	140.0	44.7	24.7	140.0	62.0	57.3	140.0	14.7	69.3	140.0
Actuated g/C Ratio	0.33	0.18	1.00	0.32	0.18	1.00	0.44	0.41	1.00	0.10	0.49	1.00
Clearance Time (s)	3.0	7.8		3.0	7.8		3.0	6.5		5.0	6.5	
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	359	651	1566	487	625	1545	114	2064	1575	343	2521	1507
v/s Ratio Prot	c0.17	0.07		0.15	0.13		0.01	0.36		0.08	c0.44	
v/s Ratio Perm	c0.21		0.06	0.19		c0.82	0.17		0.09			0.05
v/c Ratio	1.14	0.36	0.06	1.06	0.72	0.82	0.40	0.87	0.09	0.79	0.89	0.05
Uniform Delay, d1	41.5	50.0	0.0	45.1	54.4	0.0	29.0	38.0	0.0	61.2	31.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	89.9	0.7	0.1	58.1	5.1	5.0	2.3	5.4	0.1	13.5	5.2	0.1
Delay (s)	131.5	50.7	0.1	103.3	59.5	5.0	31.3	43.4	0.1	74.7	37.2	0.1
Level of Service	F	D	A	F	E	A	C	D	A	E	D	A
Approach Delay (s)		88.5			38.7			39.9			40.1	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM Average Control Delay	44.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	3.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

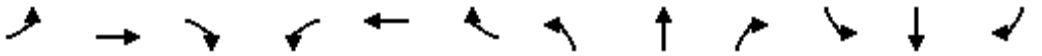
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	436	34	206	412	336	155	2985	555	886	1583	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2150	1900	2100	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	7.8	7.8	4.0	3.0	7.8	4.0	6.5	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1607	3510	1293	1709	3510	1461	1783	5762	1541	3716	4902	1547
Flt Permitted	0.51	1.00	1.00	0.28	1.00	1.00	0.15	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	863	3510	1293	507	3510	1461	279	5762	1541	3716	4902	1547
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	436	34	206	412	336	155	2985	555	886	1583	610
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	92	436	34	206	412	336	155	2985	555	886	1583	610
Confl. Peds. (#/hr)	1		28	28		1	3		13	13		3
Heavy Vehicles (%)	11%	4%	21%	4%	4%	8%	0%	3%	2%	3%	7%	1%
Turn Type	Perm		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	24.7	24.7	140.0	32.7	32.7	140.0	60.7	60.7	140.0	27.3	93.0	140.0
Effective Green, g (s)	24.7	24.7	140.0	32.7	32.7	140.0	60.7	60.7	140.0	27.3	93.0	140.0
Actuated g/C Ratio	0.18	0.18	1.00	0.23	0.23	1.00	0.43	0.43	1.00	0.20	0.66	1.00
Clearance Time (s)	7.8	7.8		3.0	7.8		6.5	6.5		5.0	6.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	152	619	1293	161	820	1461	121	2498	1541	725	3256	1547
v/s Ratio Prot		0.12		c0.05	0.12			0.52		c0.24	0.32	
v/s Ratio Perm	0.11		0.03	c0.25		0.23	c0.56		0.36			0.39
v/c Ratio	0.61	0.70	0.03	1.28	0.50	0.23	1.28	1.19	0.36	1.22	0.49	0.39
Uniform Delay, d1	53.2	54.2	0.0	53.7	46.6	0.0	39.6	39.6	0.0	56.4	11.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.6	4.6	0.0	164.8	1.0	0.4	175.3	91.9	0.7	112.1	0.5	0.8
Delay (s)	62.8	58.8	0.0	218.5	47.6	0.4	215.0	131.6	0.7	168.5	12.2	0.8
Level of Service	E	E	A	F	D	A	F	F	A	F	B	A
Approach Delay (s)		55.9			67.9			115.4			54.9	
Approach LOS		E			E			F			D	

Intersection Summary			
HCM Average Control Delay	83.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		

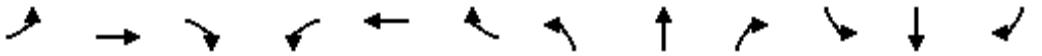
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	259	109	571	499	1400	51	1988	164	300	2479	78
Ideal Flow (vphpl)	1900	1900	1900	2050	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	7.8	4.0	3.0	7.8	4.0	3.0	6.5	4.0	5.0	6.5	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1749	3544	1566	1907	3544	1545	1785	5043	1575	3267	5092	1507
Flt Permitted	0.25	1.00	1.00	0.58	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	452	3544	1566	1165	3544	1545	135	5043	1575	3267	5092	1507
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	450	259	109	571	499	1400	51	1988	164	300	2479	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	450	259	109	571	499	1400	51	1988	164	300	2479	78
Confl. Peds. (#/hr)	5					5			6	6		
Heavy Vehicles (%)	2%	3%	2%	1%	3%	2%	0%	4%	0%	6%	3%	6%
Turn Type	pm+pt		Free	pm+pt		Free	pm+pt		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free	8		Free	2		Free			Free
Actuated Green, G (s)	48.7	26.7	140.0	46.7	25.7	140.0	60.1	55.7	140.0	14.3	67.6	140.0
Effective Green, g (s)	48.7	26.7	140.0	46.7	25.7	140.0	60.1	55.7	140.0	14.3	67.6	140.0
Actuated g/C Ratio	0.35	0.19	1.00	0.33	0.18	1.00	0.43	0.40	1.00	0.10	0.48	1.00
Clearance Time (s)	3.0	7.8		3.0	7.8		3.0	6.5		5.0	6.5	
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	361	676	1566	500	651	1545	110	2006	1575	334	2459	1507
v/s Ratio Prot	c0.20	0.07		0.17	0.14		0.01	0.39		0.09	c0.49	
v/s Ratio Perm	c0.24		0.07	0.21		c0.91	0.18		0.10			0.05
v/c Ratio	1.25	0.38	0.07	1.14	0.77	0.91	0.46	0.99	0.10	0.90	1.01	0.05
Uniform Delay, d1	39.6	49.5	0.0	43.9	54.3	0.0	33.3	41.9	0.0	62.1	36.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	132.1	0.8	0.1	85.5	6.3	9.2	3.1	18.1	0.1	26.7	20.1	0.1
Delay (s)	171.7	50.2	0.1	129.4	60.6	9.2	36.4	60.0	0.1	88.8	56.3	0.1
Level of Service	F	D	A	F	E	A	D	E	A	F	E	A
Approach Delay (s)		110.4			47.4			55.0			58.2	
Approach LOS		F			D			D			E	

Intersection Summary			
HCM Average Control Delay	59.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	3.0
Intersection Capacity Utilization	110.8%	ICU Level of Service	H
Analysis Period (min)	15		

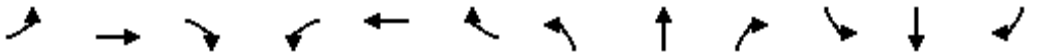
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	376	313	215	119	101	284	188	900	297	497	564	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3298	3544	1415	1708	3318	1456	3298	5092	1560	3330	4995	1399
Flt Permitted	0.95	1.00	1.00	0.56	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3298	3544	1415	1010	3318	1456	3298	5092	1560	3330	4995	1399
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	376	313	215	119	101	284	188	900	297	497	564	152
RTOR Reduction (vph)	0	0	169	0	0	192	0	0	0	0	0	82
Lane Group Flow (vph)	376	313	46	119	101	92	188	900	297	497	564	70
Confl. Peds. (#/hr)	19		12	12		19	4		4	4		4
Heavy Vehicles (%)	5%	3%	10%	4%	10%	6%	5%	3%	1%	4%	5%	11%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	20.6	29.8	29.8	29.0	18.1	18.1	13.2	43.4	140.0	33.9	64.1	64.1
Effective Green, g (s)	20.6	29.8	29.8	29.0	18.1	18.1	13.2	43.4	140.0	33.9	64.1	64.1
Actuated g/C Ratio	0.15	0.21	0.21	0.21	0.13	0.13	0.09	0.31	1.00	0.24	0.46	0.46
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	485	754	301	264	429	188	311	1579	1560	806	2287	641
v/s Ratio Prot	c0.11	0.09		0.04	0.03		0.06	c0.18		c0.15	0.11	
v/s Ratio Perm			0.03	0.06		c0.06			0.19			0.05
v/c Ratio	0.78	0.42	0.15	0.45	0.24	0.49	0.60	0.57	0.19	0.62	0.25	0.11
Uniform Delay, d1	57.5	47.6	44.8	47.3	54.7	56.6	60.9	40.5	0.0	47.3	23.2	21.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.8	0.8	0.5	2.5	0.6	4.1	3.3	1.5	0.3	2.0	0.3	0.3
Delay (s)	66.3	48.4	45.3	49.8	55.3	60.7	64.2	42.0	0.3	49.3	23.5	22.0
Level of Service	E	D	D	D	E	E	E	D	A	D	C	C
Approach Delay (s)		55.1			57.1			36.1			33.9	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

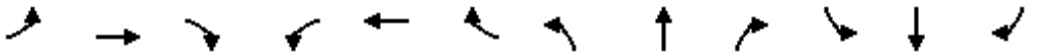
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	512	410	228	246	493	430	329	910	202	298	974	295
Ideal Flow (vphpl)	2200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3855	3444	1515	1699	3444	1449	3298	5043	1487	3267	5043	1448
Flt Permitted	0.95	1.00	1.00	0.49	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3855	3444	1515	881	3444	1449	3298	5043	1487	3267	5043	1448
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	512	410	228	246	493	430	329	910	202	298	974	295
RTOR Reduction (vph)	0	0	165	0	0	177	0	0	0	0	0	196
Lane Group Flow (vph)	512	410	63	246	493	253	329	910	202	298	974	99
Confl. Peds. (#/hr)	23		1	1		23	15		3	3		15
Heavy Vehicles (%)	4%	6%	4%	5%	6%	6%	5%	4%	6%	6%	4%	5%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	18.8	38.5	38.5	48.1	32.9	32.9	17.4	47.3	140.0	17.0	46.9	46.9
Effective Green, g (s)	18.8	38.5	38.5	48.1	32.9	32.9	17.4	47.3	140.0	17.0	46.9	46.9
Actuated g/C Ratio	0.13	0.28	0.28	0.34	0.23	0.23	0.12	0.34	1.00	0.12	0.33	0.33
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	518	947	417	391	809	341	410	1704	1487	397	1689	485
v/s Ratio Prot	c0.13	0.12		0.07	0.14		c0.10	0.18		0.09	c0.19	
v/s Ratio Perm			0.04	0.15		c0.17			c0.14			0.07
v/c Ratio	0.99	0.43	0.15	0.63	0.61	0.74	0.80	0.53	0.14	0.75	0.58	0.20
Uniform Delay, d1	60.5	41.8	38.4	35.3	47.8	49.6	59.6	37.4	0.0	59.5	38.4	33.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.4	0.7	0.4	4.4	1.9	10.1	10.8	1.2	0.2	9.2	1.4	0.9
Delay (s)	96.9	42.4	38.7	39.7	49.7	59.7	70.4	38.7	0.2	68.7	39.8	34.2
Level of Service	F	D	D	D	D	E	E	D	A	E	D	C
Approach Delay (s)		65.9			51.3			40.5			44.2	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	49.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	95.2%	ICU Level of Service	F
Analysis Period (min)	15		

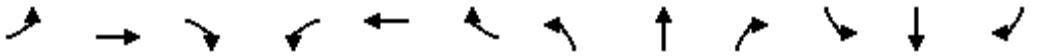
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	411	342	235	130	110	311	206	984	325	544	617	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3298	3544	1415	1708	3318	1456	3298	5092	1560	3330	4995	1399
Flt Permitted	0.95	1.00	1.00	0.55	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3298	3544	1415	982	3318	1456	3298	5092	1560	3330	4995	1399
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	411	342	235	130	110	311	206	984	325	544	617	166
RTOR Reduction (vph)	0	0	185	0	0	259	0	0	0	0	0	85
Lane Group Flow (vph)	411	342	50	130	110	52	206	984	325	544	617	81
Confl. Peds. (#/hr)	19		12	12		19	4		4	4		4
Heavy Vehicles (%)	5%	3%	10%	4%	10%	6%	5%	3%	1%	4%	5%	11%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	18.0	29.8	29.8	23.8	16.8	16.8	13.2	51.7	140.0	29.5	68.0	68.0
Effective Green, g (s)	18.0	29.8	29.8	23.8	16.8	16.8	13.2	51.7	140.0	29.5	68.0	68.0
Actuated g/C Ratio	0.13	0.21	0.21	0.17	0.12	0.12	0.09	0.37	1.00	0.21	0.49	0.49
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	424	754	301	203	398	175	311	1880	1560	702	2426	680
v/s Ratio Prot	c0.12	0.10		0.03	0.03		0.06	c0.19		c0.16	0.12	
v/s Ratio Perm			0.04	c0.08		0.04			0.21			0.06
v/c Ratio	0.97	0.45	0.17	0.64	0.28	0.30	0.66	0.52	0.21	0.77	0.25	0.12
Uniform Delay, d1	60.7	48.0	45.0	52.4	56.1	56.2	61.2	34.5	0.0	52.1	21.1	19.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	35.8	0.9	0.5	9.1	0.8	2.0	5.2	1.0	0.3	6.2	0.3	0.4
Delay (s)	96.6	48.9	45.5	61.5	56.9	58.2	66.5	35.6	0.3	58.4	21.4	20.0
Level of Service	F	D	D	E	E	E	E	D	A	E	C	C
Approach Delay (s)		67.9			58.7			32.2			36.4	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM Average Control Delay	44.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

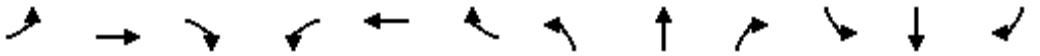
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	560	448	249	269	539	470	360	995	221	326	1065	323
Ideal Flow (vphpl)	2200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3855	3444	1515	1699	3444	1449	3298	5043	1487	3267	5043	1448
Flt Permitted	0.95	1.00	1.00	0.48	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3855	3444	1515	855	3444	1449	3298	5043	1487	3267	5043	1448
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	560	448	249	269	539	470	360	995	221	326	1065	323
RTOR Reduction (vph)	0	0	178	0	0	192	0	0	0	0	0	226
Lane Group Flow (vph)	560	448	71	269	539	278	360	995	221	326	1065	97
Confl. Peds. (#/hr)	23		1	1		23	15		3	3		15
Heavy Vehicles (%)	4%	6%	4%	5%	6%	6%	5%	4%	6%	6%	4%	5%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	23.6	39.8	39.8	51.2	32.7	32.7	17.8	42.3	140.0	17.4	41.9	41.9
Effective Green, g (s)	23.6	39.8	39.8	51.2	32.7	32.7	17.8	42.3	140.0	17.4	41.9	41.9
Actuated g/C Ratio	0.17	0.28	0.28	0.37	0.23	0.23	0.13	0.30	1.00	0.12	0.30	0.30
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	650	979	431	424	804	338	419	1524	1487	406	1509	433
v/s Ratio Prot	c0.15	0.13		0.08	0.16		c0.11	0.20		0.10	c0.21	
v/s Ratio Perm			0.05	0.15		c0.19			c0.15			0.07
v/c Ratio	0.86	0.46	0.16	0.63	0.67	0.82	0.86	0.65	0.15	0.80	0.71	0.22
Uniform Delay, d1	56.6	41.2	37.6	33.5	48.8	50.9	59.9	42.5	0.0	59.6	43.6	36.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.3	0.7	0.4	4.3	2.9	16.4	15.9	2.2	0.2	12.4	2.8	1.2
Delay (s)	68.9	41.9	38.0	37.7	51.6	67.2	75.8	44.7	0.2	72.0	46.4	38.0
Level of Service	E	D	D	D	D	E	E	D	A	E	D	D
Approach Delay (s)		53.2			54.4			45.5			49.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	50.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

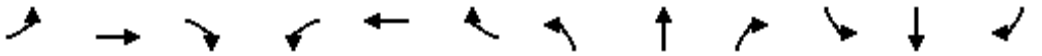
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	454	378	260	144	122	343	227	1087	359	600	681	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3298	3544	1415	1709	3318	1456	3298	5092	1560	3330	4995	1399
Flt Permitted	0.95	1.00	1.00	0.53	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3298	3544	1415	949	3318	1456	3298	5092	1560	3330	4995	1399
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	454	378	260	144	122	343	227	1087	359	600	681	184
RTOR Reduction (vph)	0	0	206	0	0	254	0	0	0	0	0	98
Lane Group Flow (vph)	454	378	54	144	122	89	227	1087	359	600	681	86
Confl. Peds. (#/hr)	19		12	12		19	4		4	4		4
Heavy Vehicles (%)	5%	3%	10%	4%	10%	6%	5%	3%	1%	4%	5%	11%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	18.0	29.3	29.3	27.3	18.3	18.3	14.1	45.6	140.0	34.1	65.6	65.6
Effective Green, g (s)	18.0	29.3	29.3	27.3	18.3	18.3	14.1	45.6	140.0	34.1	65.6	65.6
Actuated g/C Ratio	0.13	0.21	0.21	0.20	0.13	0.13	0.10	0.33	1.00	0.24	0.47	0.47
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	424	742	296	234	434	190	332	1659	1560	811	2341	656
v/s Ratio Prot	c0.14	0.11		0.04	0.04		0.07	c0.21		c0.18	0.14	
v/s Ratio Perm			0.04	c0.08		0.06			0.23			0.06
v/c Ratio	1.07	0.51	0.18	0.62	0.28	0.47	0.68	0.66	0.23	0.74	0.29	0.13
Uniform Delay, d1	61.0	49.0	45.5	49.6	54.9	56.4	60.8	40.5	0.0	48.9	22.9	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	63.9	1.2	0.6	6.8	0.7	3.8	5.7	2.0	0.3	4.3	0.3	0.4
Delay (s)	124.9	50.1	46.1	56.4	55.7	60.1	66.5	42.5	0.3	53.2	23.2	21.5
Level of Service	F	D	D	E	E	E	E	D	A	D	C	C
Approach Delay (s)		80.3			58.4			36.7			35.3	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM Average Control Delay	48.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

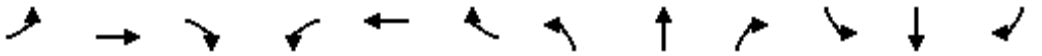
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	619	495	275	297	596	519	397	1099	244	360	1177	356
Ideal Flow (vphpl)	2200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0	7.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3855	3444	1515	1700	3444	1449	3298	5043	1487	3267	5043	1448
Flt Permitted	0.95	1.00	1.00	0.42	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3855	3444	1515	747	3444	1449	3298	5043	1487	3267	5043	1448
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	619	495	275	297	596	519	397	1099	244	360	1177	356
RTOR Reduction (vph)	0	0	196	0	0	196	0	0	0	0	0	235
Lane Group Flow (vph)	619	495	79	297	596	323	397	1099	244	360	1177	121
Confl. Peds. (#/hr)	23		1	1		23	15		3	3		15
Heavy Vehicles (%)	4%	6%	4%	5%	6%	6%	5%	4%	6%	6%	4%	5%
Turn Type	Prot		Perm	pm+pt		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4	8		8			Free			6
Actuated Green, G (s)	24.0	40.3	40.3	54.3	34.3	34.3	18.1	39.7	140.0	18.0	39.6	39.6
Effective Green, g (s)	24.0	40.3	40.3	54.3	34.3	34.3	18.1	39.7	140.0	18.0	39.6	39.6
Actuated g/C Ratio	0.17	0.29	0.29	0.39	0.24	0.24	0.13	0.28	1.00	0.13	0.28	0.28
Clearance Time (s)	5.0	7.0	7.0	3.0	7.0	7.0	5.0	7.0		5.0	7.0	7.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	661	991	436	426	844	355	426	1430	1487	420	1426	410
v/s Ratio Prot	c0.16	0.14		0.10	0.17		c0.12	0.22		0.11	c0.23	
v/s Ratio Perm			0.05	0.17		c0.22			c0.16			0.08
v/c Ratio	0.94	0.50	0.18	0.70	0.71	0.91	0.93	0.77	0.16	0.86	0.83	0.30
Uniform Delay, d1	57.2	41.5	37.5	31.9	48.2	51.4	60.3	45.9	0.0	59.7	47.0	39.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.4	0.8	0.4	6.2	3.4	27.9	27.2	4.0	0.2	17.1	5.6	1.8
Delay (s)	78.6	42.3	37.9	38.1	51.6	79.2	87.5	50.0	0.2	76.8	52.5	41.1
Level of Service	E	D	D	D	D	E	F	D	A	E	D	D
Approach Delay (s)		57.6			58.9			51.6			55.0	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM Average Control Delay	55.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		

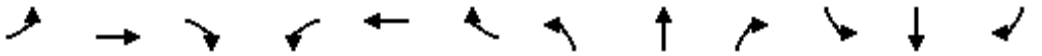
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	565	1469	130	341	502	58	431	1507	541	251	1167	253
Ideal Flow (vphpl)	2300	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2117	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Flt Permitted	0.41	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	904	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	565	1469	130	341	502	58	431	1507	541	251	1167	253
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	565	1469	130	341	502	58	431	1507	541	251	1167	253
Confl. Peds. (#/hr)	2		25	25		2	1		12	12		1
Heavy Vehicles (%)	2%	2%	4%	14%	7%	21%	2%	4%	4%	5%	5%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	59.8	39.0	140.0	17.4	37.6	140.0	18.8	39.8	140.0	17.4	38.4	140.0
Effective Green, g (s)	59.8	39.0	140.0	17.4	37.6	140.0	18.8	39.8	140.0	17.4	38.4	140.0
Actuated g/C Ratio	0.43	0.28	1.00	0.12	0.27	1.00	0.13	0.28	1.00	0.12	0.27	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	566	1508	1506	378	1317	1303	456	1509	1512	410	1370	1517
v/s Ratio Prot	c0.15	0.27		0.11	0.10		c0.13	c0.28		0.08	0.23	
v/s Ratio Perm	c0.28		0.09			0.04			c0.36			0.17
v/c Ratio	1.00	0.97	0.09	0.90	0.38	0.04	0.95	1.00	0.36	0.61	0.85	0.17
Uniform Delay, d1	34.8	50.0	0.0	60.5	41.7	0.0	60.1	50.1	0.0	58.1	48.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	37.2	17.4	0.1	25.1	0.4	0.1	28.5	22.9	0.7	3.9	6.8	0.2
Delay (s)	72.0	67.4	0.1	85.6	42.1	0.1	88.6	72.9	0.7	62.0	55.0	0.2
Level of Service	E	E	A	F	D	A	F	E	A	E	D	A
Approach Delay (s)		64.6			55.9			59.9			47.7	
Approach LOS		E			E			E			D	

Intersection Summary			
HCM Average Control Delay	58.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

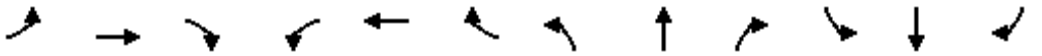
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
Ideal Flow (vphpl)	2300	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2139	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Flt Permitted	0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	274	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
Confl. Peds. (#/hr)	1		1	1		1						
Heavy Vehicles (%)	1%	2%	1%	5%	1%	11%	3%	3%	10%	6%	3%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	50.9	32.9	140.0	24.3	41.2	140.0	16.2	42.6	140.0	13.8	40.2	140.0
Effective Green, g (s)	50.9	32.9	140.0	24.3	41.2	140.0	16.2	42.6	140.0	13.8	40.2	140.0
Actuated g/C Ratio	0.36	0.23	1.00	0.17	0.29	1.00	0.12	0.30	1.00	0.10	0.29	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	339	1208	1562	572	1528	1421	389	1794	1452	322	1462	1536
v/s Ratio Prot	c0.19	0.15		c0.16	0.25		c0.08	c0.30		0.04	0.26	
v/s Ratio Perm	c0.34		0.15			0.10			c0.19			0.15
v/c Ratio	1.45	0.63	0.15	0.91	0.83	0.10	0.71	0.99	0.19	0.45	0.92	0.15
Uniform Delay, d1	40.9	48.1	0.0	56.8	46.2	0.0	59.6	48.5	0.0	59.5	48.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	220.2	1.5	0.2	19.3	4.6	0.1	5.8	18.8	0.3	2.1	11.1	0.2
Delay (s)	261.1	49.5	0.2	76.0	50.8	0.1	65.5	67.2	0.3	61.6	59.4	0.2
Level of Service	F	D	A	E	D	A	E	E	A	E	E	A
Approach Delay (s)		112.0			53.8			59.1			51.6	
Approach LOS		F			D			E			D	

Intersection Summary			
HCM Average Control Delay	66.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	108.0%	ICU Level of Service	G
Analysis Period (min)	15		

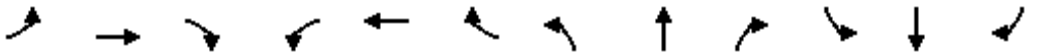
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	624	1623	144	377	555	64	476	1665	598	277	1289	279
Ideal Flow (vphpl)	2300	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2118	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Flt Permitted	0.34	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	750	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	624	1623	144	377	555	64	476	1665	598	277	1289	279
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	624	1623	144	377	555	64	476	1665	598	277	1289	279
Confl. Peds. (#/hr)	2		25	25		2	1		12	12		1
Heavy Vehicles (%)	2%	2%	4%	14%	7%	21%	2%	4%	4%	5%	5%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	62.9	40.9	140.0	17.0	32.9	140.0	19.0	43.7	140.0	12.0	36.7	140.0
Effective Green, g (s)	62.9	40.9	140.0	17.0	32.9	140.0	19.0	43.7	140.0	12.0	36.7	140.0
Actuated g/C Ratio	0.45	0.29	1.00	0.12	0.23	1.00	0.14	0.31	1.00	0.09	0.26	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	601	1581	1506	369	1152	1303	461	1657	1512	283	1309	1517
v/s Ratio Prot	c0.20	0.30		0.12	0.11		c0.14	c0.31		0.08	0.26	
v/s Ratio Perm	c0.27		0.10			0.05			0.40			0.18
v/c Ratio	1.04	1.03	0.10	1.02	0.48	0.05	1.03	1.00	0.40	0.98	0.98	0.18
Uniform Delay, d1	32.0	49.5	0.0	61.5	46.2	0.0	60.5	48.1	0.0	63.9	51.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	47.0	29.7	0.1	52.5	0.7	0.1	50.5	23.3	0.8	47.6	21.5	0.3
Delay (s)	79.0	79.2	0.1	114.0	46.9	0.1	111.0	71.4	0.8	111.4	72.9	0.3
Level of Service	E	E	A	F	D	A	F	E	A	F	E	A
Approach Delay (s)		74.4			69.3			62.9			67.7	
Approach LOS		E			E			E			E	

Intersection Summary			
HCM Average Control Delay	68.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.1%	ICU Level of Service	G
Analysis Period (min)	15		

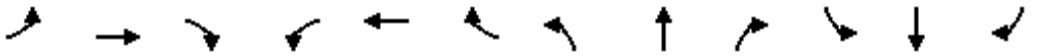
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	545	838	258	574	1408	157	305	1960	306	159	1489	260
Ideal Flow (vphpl)	2300	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2139	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Flt Permitted	0.13	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	287	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	545	838	258	574	1408	157	305	1960	306	159	1489	260
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	545	838	258	574	1408	157	305	1960	306	159	1489	260
Confl. Peds. (#/hr)	1		1	1		1						
Heavy Vehicles (%)	1%	2%	1%	5%	1%	11%	3%	3%	10%	6%	3%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	55.4	31.4	140.0	25.0	34.4	140.0	13.0	45.2	140.0	12.0	44.2	140.0
Effective Green, g (s)	55.4	31.4	140.0	25.0	34.4	140.0	13.0	45.2	140.0	12.0	44.2	140.0
Actuated g/C Ratio	0.40	0.22	1.00	0.18	0.25	1.00	0.09	0.32	1.00	0.09	0.32	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	431	1153	1562	589	1276	1421	312	1904	1452	280	1608	1536
v/s Ratio Prot	c0.22	0.16		0.17	0.27		c0.09	c0.33		0.05	0.29	
v/s Ratio Perm	c0.28		0.17			0.11			c0.21			0.17
v/c Ratio	1.26	0.73	0.17	0.97	1.10	0.11	0.98	1.03	0.21	0.57	0.93	0.17
Uniform Delay, d1	43.3	50.3	0.0	57.2	52.8	0.0	63.4	47.4	0.0	61.5	46.3	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	136.4	2.8	0.2	30.8	58.5	0.2	44.4	28.6	0.3	4.3	10.6	0.2
Delay (s)	179.7	53.2	0.2	88.0	111.3	0.2	107.7	76.0	0.3	65.8	56.9	0.2
Level of Service	F	D	A	F	F	A	F	E	A	E	E	A
Approach Delay (s)		86.9			96.9			70.7			50.0	
Approach LOS		F			F			E			D	

Intersection Summary			
HCM Average Control Delay	75.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	116.0%	ICU Level of Service	H
Analysis Period (min)	15		

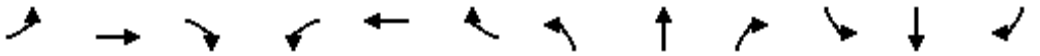
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	689	1792	159	416	613	71	526	1839	660	306	1424	309
Ideal Flow (vphpl)	2300	2000	1900	1900	1900	1900	1900	2000	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2118	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Flt Permitted	0.30	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	671	5412	1506	3038	4902	1303	3395	5308	1512	3298	4995	1517
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	689	1792	159	416	613	71	526	1839	660	306	1424	309
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	689	1792	159	416	613	71	526	1839	660	306	1424	309
Confl. Peds. (#/hr)	2		25	25		2	1		12	12		1
Heavy Vehicles (%)	2%	2%	4%	14%	7%	21%	2%	4%	4%	5%	5%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	62.4	41.4	140.0	16.0	33.4	140.0	18.0	44.2	140.0	12.0	38.2	140.0
Effective Green, g (s)	62.4	41.4	140.0	16.0	33.4	140.0	18.0	44.2	140.0	12.0	38.2	140.0
Actuated g/C Ratio	0.45	0.30	1.00	0.11	0.24	1.00	0.13	0.32	1.00	0.09	0.27	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	568	1600	1506	347	1169	1303	437	1676	1512	283	1363	1517
v/s Ratio Prot	c0.23	0.33		0.14	0.13		c0.15	c0.35		0.09	0.29	
v/s Ratio Perm	c0.32		0.11			0.05			0.44			0.20
v/c Ratio	1.21	1.12	0.11	1.20	0.52	0.05	1.20	1.10	0.44	1.08	1.04	0.20
Uniform Delay, d1	31.7	49.3	0.0	62.0	46.4	0.0	61.0	47.9	0.0	64.0	50.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	111.4	63.0	0.1	114.0	0.8	0.1	111.6	53.6	0.9	76.8	36.9	0.3
Delay (s)	143.1	112.3	0.1	176.0	47.2	0.1	172.6	101.5	0.9	140.8	87.8	0.3
Level of Service	F	F	A	F	D	A	F	F	A	F	F	A
Approach Delay (s)		113.6			92.9			92.0			82.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	96.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		

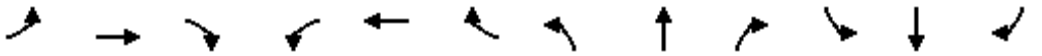
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	602	926	286	634	1556	173	337	2165	338	176	1645	287
Ideal Flow (vphpl)	2300	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2139	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Flt Permitted	0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	270	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	602	926	286	634	1556	173	337	2165	338	176	1645	287
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	602	926	286	634	1556	173	337	2165	338	176	1645	287
Confl. Peds. (#/hr)	1		1	1		1						
Heavy Vehicles (%)	1%	2%	1%	5%	1%	11%	3%	3%	10%	6%	3%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	55.4	33.4	140.0	23.0	36.4	140.0	13.0	44.4	140.0	12.8	44.2	140.0
Effective Green, g (s)	55.4	33.4	140.0	23.0	36.4	140.0	13.0	44.4	140.0	12.8	44.2	140.0
Actuated g/C Ratio	0.40	0.24	1.00	0.16	0.26	1.00	0.09	0.32	1.00	0.09	0.32	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	401	1227	1562	542	1350	1421	312	1870	1452	299	1608	1536
v/s Ratio Prot	c0.24	0.18		0.19	0.30		c0.10	c0.37		0.05	0.32	
v/s Ratio Perm	c0.36		0.18			0.12			c0.23			0.19
v/c Ratio	1.50	0.75	0.18	1.17	1.15	0.12	1.08	1.16	0.23	0.59	1.02	0.19
Uniform Delay, d1	43.4	49.5	0.0	58.5	51.8	0.0	63.5	47.8	0.0	61.1	47.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	238.3	3.2	0.3	94.8	77.6	0.2	74.0	77.5	0.4	4.5	28.5	0.3
Delay (s)	281.6	52.7	0.3	153.3	129.4	0.2	137.5	125.3	0.4	65.6	76.4	0.3
Level of Service	F	D	A	F	F	A	F	F	A	E	E	A
Approach Delay (s)		120.4			126.3			111.8			65.1	
Approach LOS		F			F			F			E	

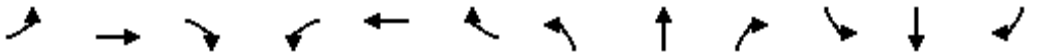
Intersection Summary			
HCM Average Control Delay	106.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	124.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	223	1610	345	170	275	144	146	734	308	154	670	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	6.9	4.0	3.0	6.9	4.0	6.9	6.9	4.0	5.0	6.9	4.0
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3429	5142	1530	1653	4768	1458	1645	5092	1559	3298	4902	1558
Flt Permitted	0.95	1.00	1.00	0.08	1.00	1.00	0.39	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3429	5142	1530	148	4768	1458	668	5092	1559	3298	4902	1558
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	223	1610	345	170	275	144	146	734	308	154	670	75
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	223	1610	345	170	275	144	146	734	308	154	670	75
Confl. Peds. (#/hr)	6		5	5		6	8		7	7		8
Confl. Bikes (#/hr)												2
Heavy Vehicles (%)	1%	2%	3%	8%	10%	8%	8%	3%	1%	5%	7%	1%
Turn Type	Prot		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			Free	8		Free	2		Free			Free
Actuated Green, G (s)	16.0	54.1	140.0	58.1	47.1	140.0	39.3	39.3	140.0	13.8	58.1	140.0
Effective Green, g (s)	16.0	54.1	140.0	58.1	47.1	140.0	39.3	39.3	140.0	13.8	58.1	140.0
Actuated g/C Ratio	0.11	0.39	1.00	0.42	0.34	1.00	0.28	0.28	1.00	0.10	0.42	1.00
Clearance Time (s)	5.0	6.9		3.0	6.9		6.9	6.9		5.0	6.9	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	392	1987	1530	180	1604	1458	188	1429	1559	325	2034	1558
v/s Ratio Prot	0.07	c0.31		c0.07	0.06			0.14		c0.05	0.14	
v/s Ratio Perm			0.23	c0.32		0.10	c0.22		0.20			0.05
v/c Ratio	0.57	0.81	0.23	0.94	0.17	0.10	0.78	0.51	0.20	0.47	0.33	0.05
Uniform Delay, d1	58.7	38.4	0.0	35.9	32.7	0.0	46.3	42.3	0.0	59.7	27.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	3.0	0.3	51.9	0.1	0.1	26.4	1.3	0.3	2.3	0.4	0.1
Delay (s)	61.8	41.3	0.3	87.8	32.8	0.1	72.7	43.6	0.3	61.9	28.2	0.1
Level of Service	E	D	A	F	C	A	E	D	A	E	C	A
Approach Delay (s)		36.9			40.7			36.0			31.6	
Approach LOS		D			D			D			C	

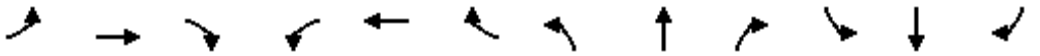
Intersection Summary			
HCM Average Control Delay	36.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
Ideal Flow (vphpl)	2300	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	3.0	8.6	4.0	5.0	8.6	4.0	5.0	7.8	4.0	5.0	7.8	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2139	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Flt Permitted	0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	274	5142	1562	3298	5193	1421	3362	5896	1452	3267	5092	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	493	759	234	520	1275	142	276	1774	277	144	1348	235
Confl. Peds. (#/hr)	1		1	1		1						
Heavy Vehicles (%)	1%	2%	1%	5%	1%	11%	3%	3%	10%	6%	3%	4%
Turn Type	pm+pt		Free	Prot		Free	Prot		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free			Free			Free
Actuated Green, G (s)	50.9	32.9	140.0	24.3	41.2	140.0	16.2	42.6	140.0	13.8	40.2	140.0
Effective Green, g (s)	50.9	32.9	140.0	24.3	41.2	140.0	16.2	42.6	140.0	13.8	40.2	140.0
Actuated g/C Ratio	0.36	0.23	1.00	0.17	0.29	1.00	0.12	0.30	1.00	0.10	0.29	1.00
Clearance Time (s)	3.0	8.6		5.0	8.6		5.0	7.8		5.0	7.8	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	339	1208	1562	572	1528	1421	389	1794	1452	322	1462	1536
v/s Ratio Prot	c0.19	0.15		c0.16	0.25		c0.08	c0.30		0.04	0.26	
v/s Ratio Perm	c0.34		0.15			0.10			c0.19			0.15
v/c Ratio	1.45	0.63	0.15	0.91	0.83	0.10	0.71	0.99	0.19	0.45	0.92	0.15
Uniform Delay, d1	40.9	48.1	0.0	56.8	46.2	0.0	59.6	48.5	0.0	59.5	48.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	220.2	1.5	0.2	19.3	4.6	0.1	5.8	18.8	0.3	2.1	11.1	0.2
Delay (s)	261.1	49.5	0.2	76.0	50.8	0.1	65.5	67.2	0.3	61.6	59.4	0.2
Level of Service	F	D	A	E	D	A	E	E	A	E	E	A
Approach Delay (s)		112.0			53.8			59.1			51.6	
Approach LOS		F			D			E			D	

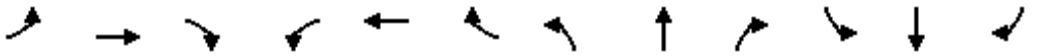
Intersection Summary			
HCM Average Control Delay	66.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	108.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



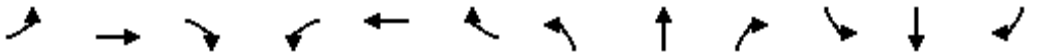
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	246	1778	381	188	304	159	161	811	340	170	740	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	6.9	4.0	3.0	6.9	4.0	6.9	6.9	4.0	5.0	6.9	4.0
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3429	5142	1530	1653	4768	1458	1646	5092	1559	3298	4902	1558
Flt Permitted	0.95	1.00	1.00	0.09	1.00	1.00	0.36	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3429	5142	1530	156	4768	1458	622	5092	1559	3298	4902	1558
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	246	1778	381	188	304	159	161	811	340	170	740	83
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	246	1778	381	188	304	159	161	811	340	170	740	83
Confl. Peds. (#/hr)	6		5	5		6	8		7	7		8
Confl. Bikes (#/hr)												2
Heavy Vehicles (%)	1%	2%	3%	8%	10%	8%	8%	3%	1%	5%	7%	1%
Turn Type	Prot		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			Free	8		Free	2		Free			Free
Actuated Green, G (s)	14.6	49.1	140.0	56.5	44.5	140.0	50.1	50.1	140.0	7.0	62.1	140.0
Effective Green, g (s)	14.6	49.1	140.0	56.5	44.5	140.0	50.1	50.1	140.0	7.0	62.1	140.0
Actuated g/C Ratio	0.10	0.35	1.00	0.40	0.32	1.00	0.36	0.36	1.00	0.05	0.44	1.00
Clearance Time (s)	5.0	6.9		3.0	6.9		6.9	6.9		5.0	6.9	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	358	1803	1530	191	1516	1458	223	1822	1559	165	2174	1558
v/s Ratio Prot	0.07	c0.35		c0.08	0.06			0.16		c0.05	0.15	
v/s Ratio Perm			0.25	0.31		0.11	c0.26		0.22			0.05
v/c Ratio	0.69	0.99	0.25	0.98	0.20	0.11	0.72	0.45	0.22	1.03	0.34	0.05
Uniform Delay, d1	60.5	45.1	0.0	39.6	34.8	0.0	38.9	34.3	0.0	66.5	25.5	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.9	17.9	0.4	60.5	0.1	0.2	18.3	0.8	0.3	78.3	0.4	0.1
Delay (s)	67.4	63.1	0.4	100.2	34.9	0.2	57.2	35.1	0.3	144.8	26.0	0.1
Level of Service	E	E	A	F	C	A	E	D	A	F	C	A
Approach Delay (s)		53.6			45.3			28.8			44.1	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	44.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	21.8
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



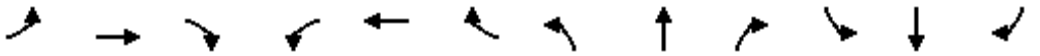
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	535	246	433	1667	180	366	898	189	251	1275	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	6.9	4.0	3.0	6.9	4.0	3.0	6.9	4.0	5.0	6.9	4.0
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3395	5193	1546	1785	5193	1559	2026	5092	1516	3463	5193	1559
Flt Permitted	0.95	1.00	1.00	0.33	1.00	1.00	0.09	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3395	5193	1546	612	5193	1559	193	5092	1516	3463	5193	1559
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	146	535	246	433	1667	180	366	898	189	251	1275	360
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	146	535	246	433	1667	180	366	898	189	251	1275	360
Confl. Peds. (#/hr)	6		1	1		6	5		3	3		5
Confl. Bikes (#/hr)			1									2
Heavy Vehicles (%)	2%	1%	2%	0%	1%	1%	2%	3%	4%	0%	1%	1%
Turn Type	Prot		Free	pm+pt		Free	pm+pt		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free	8		Free	2		Free			Free
Actuated Green, G (s)	7.0	32.1	140.0	60.1	48.1	140.0	66.1	45.7	140.0	15.4	41.3	140.0
Effective Green, g (s)	7.0	32.1	140.0	60.1	48.1	140.0	66.1	45.7	140.0	15.4	41.3	140.0
Actuated g/C Ratio	0.05	0.23	1.00	0.43	0.34	1.00	0.47	0.33	1.00	0.11	0.29	1.00
Clearance Time (s)	5.0	6.9		3.0	6.9		3.0	6.9		5.0	6.9	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	170	1191	1546	472	1784	1559	377	1662	1516	381	1532	1559
v/s Ratio Prot	0.04	0.10		c0.16	c0.32		c0.15	0.18		0.07	0.25	
v/s Ratio Perm			0.16	0.23		0.12	c0.31		0.12			0.23
v/c Ratio	0.86	0.45	0.16	0.92	0.93	0.12	0.97	0.54	0.12	0.66	0.83	0.23
Uniform Delay, d1	66.0	46.4	0.0	31.0	44.4	0.0	43.5	38.6	0.0	59.8	46.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	34.9	0.6	0.2	23.6	10.0	0.2	38.5	1.3	0.2	5.5	5.4	0.3
Delay (s)	100.9	46.9	0.2	54.6	54.4	0.2	82.0	39.8	0.2	65.2	51.6	0.3
Level of Service	F	D	A	D	D	A	F	D	A	E	D	A
Approach Delay (s)		43.0			50.2			45.3			43.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	46.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	272	1965	421	207	336	176	178	896	376	188	818	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	6.9	4.0	3.0	6.9	4.0	6.9	6.9	4.0	5.0	6.9	4.0
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3429	5142	1530	1653	4768	1458	1646	5092	1559	3298	4902	1558
Flt Permitted	0.95	1.00	1.00	0.09	1.00	1.00	0.33	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3429	5142	1530	156	4768	1458	574	5092	1559	3298	4902	1558
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	272	1965	421	207	336	176	178	896	376	188	818	92
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	272	1965	421	207	336	176	178	896	376	188	818	92
Confl. Peds. (#/hr)	6		5	5		6	8		7	7		8
Confl. Bikes (#/hr)												2
Heavy Vehicles (%)	1%	2%	3%	8%	10%	8%	8%	3%	1%	5%	7%	1%
Turn Type	Prot		Free	pm+pt		Free	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			Free	8		Free	2		Free			Free
Actuated Green, G (s)	15.6	51.1	140.0	55.5	44.5	140.0	48.1	48.1	140.0	8.0	61.1	140.0
Effective Green, g (s)	15.6	51.1	140.0	55.5	44.5	140.0	48.1	48.1	140.0	8.0	61.1	140.0
Actuated g/C Ratio	0.11	0.37	1.00	0.40	0.32	1.00	0.34	0.34	1.00	0.06	0.44	1.00
Clearance Time (s)	5.0	6.9		3.0	6.9		6.9	6.9		5.0	6.9	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	382	1877	1530	179	1516	1458	197	1749	1559	188	2139	1558
v/s Ratio Prot	0.08	c0.38		c0.09	0.07			0.18		c0.06	0.17	
v/s Ratio Perm			0.28	c0.37		0.12	c0.31		0.24			0.06
v/c Ratio	0.71	1.05	0.28	1.16	0.22	0.12	0.90	0.51	0.24	1.00	0.38	0.06
Uniform Delay, d1	60.0	44.5	0.0	38.9	35.0	0.0	43.7	36.6	0.0	66.0	26.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	34.3	0.4	115.6	0.2	0.2	43.0	1.1	0.4	65.6	0.5	0.1
Delay (s)	67.6	78.7	0.4	154.6	35.2	0.2	86.7	37.7	0.4	131.6	27.2	0.1
Level of Service	E	E	A	F	D	A	F	D	A	F	C	A
Approach Delay (s)		65.2			61.0			34.0			42.8	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	591	272	478	1841	199	404	992	209	277	1408	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	2200	1900	1900	1900	1900	1900
Lane Width	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5	3.5	3.7	3.5
Total Lost time (s)	5.0	6.9	4.0	3.0	6.9	4.0	3.0	6.9	4.0	5.0	6.9	4.0
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3395	5193	1546	1785	5193	1559	2026	5092	1516	3463	5193	1559
Flt Permitted	0.95	1.00	1.00	0.29	1.00	1.00	0.09	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3395	5193	1546	543	5193	1559	198	5092	1516	3463	5193	1559
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	161	591	272	478	1841	199	404	992	209	277	1408	398
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	161	591	272	478	1841	199	404	992	209	277	1408	398
Confl. Peds. (#/hr)	6		1	1		6	5		3	3		5
Confl. Bikes (#/hr)			1									2
Heavy Vehicles (%)	2%	1%	2%	0%	1%	1%	2%	3%	4%	0%	1%	1%
Turn Type	Prot		Free	pm+pt		Free	pm+pt		Free	Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free	8		Free	2		Free			Free
Actuated Green, G (s)	7.0	32.1	140.0	61.1	49.1	140.0	65.1	43.8	140.0	16.3	40.1	140.0
Effective Green, g (s)	7.0	32.1	140.0	61.1	49.1	140.0	65.1	43.8	140.0	16.3	40.1	140.0
Actuated g/C Ratio	0.05	0.23	1.00	0.44	0.35	1.00	0.46	0.31	1.00	0.12	0.29	1.00
Clearance Time (s)	5.0	6.9		3.0	6.9		3.0	6.9		5.0	6.9	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	170	1191	1546	468	1821	1559	379	1593	1516	403	1487	1559
v/s Ratio Prot	0.05	0.11		c0.19	0.35		c0.17	0.19		0.08	0.27	
v/s Ratio Perm			0.18	c0.26		0.13	c0.33		0.14			0.26
v/c Ratio	0.95	0.50	0.18	1.02	1.01	0.13	1.07	0.62	0.14	0.69	0.95	0.26
Uniform Delay, d1	66.3	46.9	0.0	32.4	45.5	0.0	44.6	41.0	0.0	59.4	48.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	54.3	0.7	0.2	47.1	23.8	0.2	64.8	1.8	0.2	6.2	13.7	0.4
Delay (s)	120.6	47.6	0.2	79.5	69.3	0.2	109.5	42.9	0.2	65.6	62.6	0.4
Level of Service	F	D	A	E	E	A	F	D	A	E	E	A
Approach Delay (s)		46.5			65.8			54.1			51.1	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM Average Control Delay	56.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	106.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Appendix F

Northbound Right-Turn Assessment

Memo – Northbound Right-Turn Lane

Project:	Derry / Argentia EA
Subject:	**Northbound Right-Turn Lane**
To:	Sally Rook – Region of Peel
From:	Tony Reitmeier – HDR Andrew O'Connor – HDR
Date:	July 28, 2014

The baseline recommended configuration for the intersection of Derry Road and Argentia Road includes a dedicated northbound right-turn lane on Argentia Road, in addition to 2 through lanes and a dedicated left-turn lane. This configuration is shown in **Figure 1**.

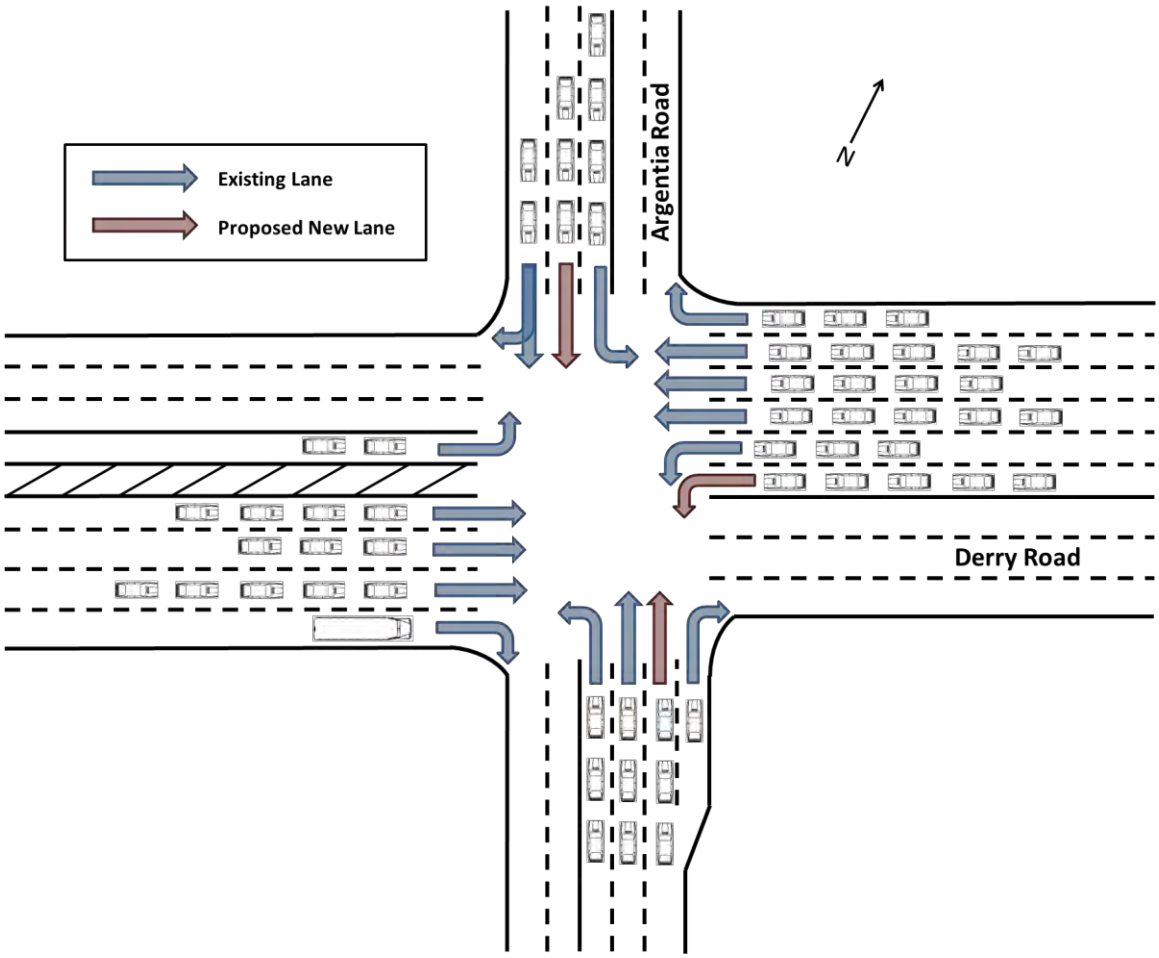


Figure 1: Preferred Configuration for Intersection of Derry Road and Argentia Road

The right-turn lane was sized based on the queuing results from Synchro. During the consultation process, however, it was noted that the northbound right-turn lane would result in impacts at the southeast quadrant of the intersection:

- Removal of mature trees required
- Impacts to utilities

- Potential impact to existing brick fence for Sheraton Four Points, which includes lighting and electrical connections

To mitigate these impacts, the team is considering modifications to the proposed configuration at this part of the intersection. The purpose of this memo is to evaluate two scenarios regarding the northbound right-turn lane proposed on Argentia Road:

- Scenario 1: Eliminate dedicated northbound right-turn lane
- Scenario 2: Provide shorter northbound right-turn lane

Intersection operations for these two scenarios are compared to the "Do Nothing" approach and the "Baseline Recommended" approach during the AM and PM peak period for the following horizon years:

- Existing conditions (see **Table 1**)
- 2021 conditions (see **Table 2**)
- 2031 conditions (see **Table 3**)

Queuing for each option is summarized in **Table 4**.

Findings

- Inclusion of a northbound right-turn lane **does result** in an improvement to intersection operations (particularly during the PM Peak period) during all horizon years compared to "Scenario 1" which does not include a right-turn lane.
- "Baseline Recommended" option includes a right-turn lane with a storage length (105 m) that is close to the 2031 PM Peak period 95th percentile queue (110 m). However, this is the option that results in the impacts to the Sheraton property described above
- "Scenario 2" includes the shorter right-turn lane. Level-of-service and v/c ratios **are equivalent** to the "Baseline Recommended" option; however, its storage length is not long enough to contain 95th percentile queues in any horizon year. This indicates that in the most congested periods of the PM peak hour, queues will extend beyond the right-turn lane and into the through lane
- Preferred option based on traffic operations in "Scenario 2" with the shorter right-turn lane. This option balances traffic operations and queuing with the cost of the project and extent of impacts to the Sheraton Four Points property.

Design Feasibility

A design review has indicated that a right-turn lane can fit at the intersection as follows:

- 26 m storage
- 44 m taper

A conceptual design sketch is shown in

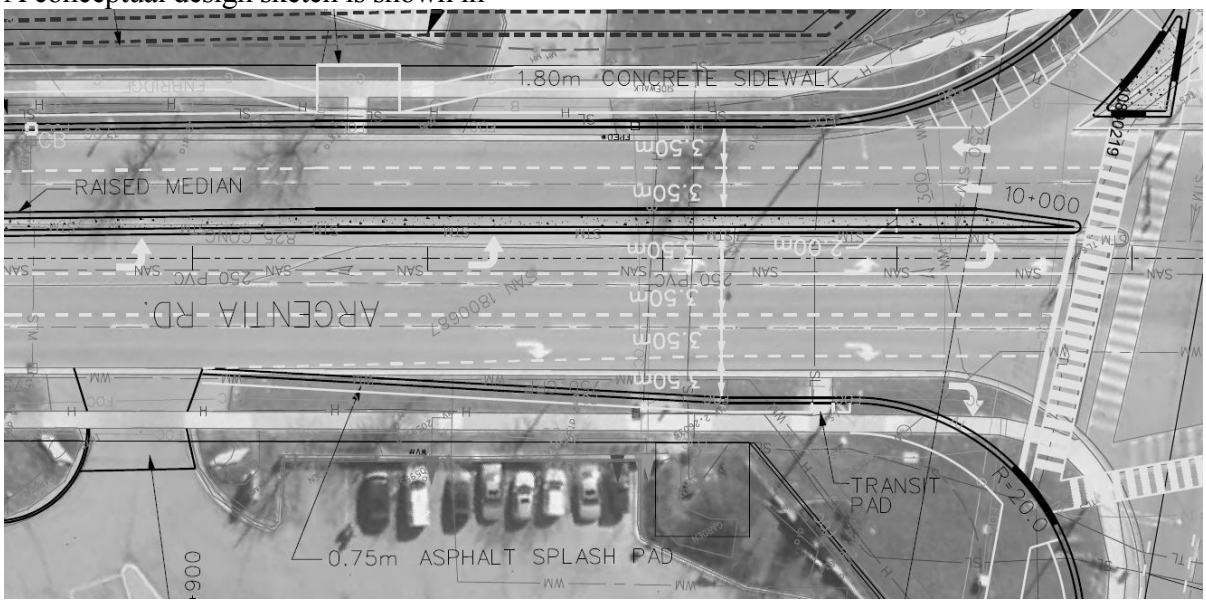


Figure 2.

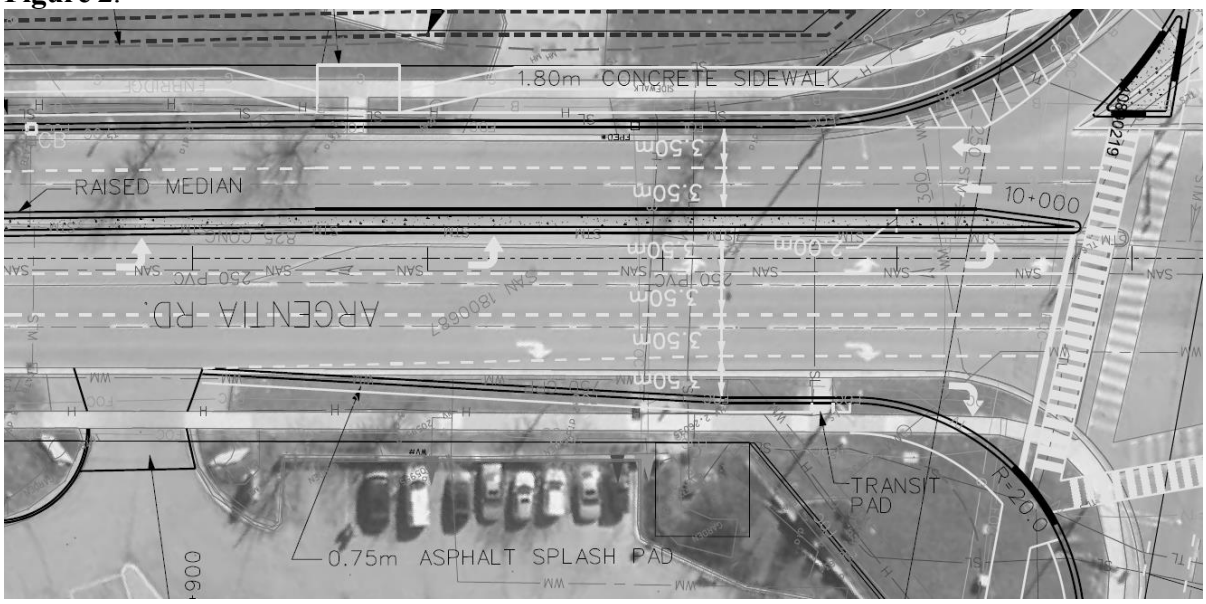


Figure 2: Conceptual Sketch of Shortened Northbound Right-Turn Lane

A lane of this length would result in fewer impacts to the Sheraton hotel site. It is **recommended for incorporation** into the preliminary design that will be documented within the EA. It is noted that this provides less storage than would be ideal; however, it is a compromise to reduce the cost and social and environmental impacts in this location.

Table 1: Existing Traffic Operations

Movement	Existing				Baseline Recommended*				Scenario 1: No NB RT Lane				Scenario 2: Shorter NB RT Lane			
	AM		PM		AM		PM		AM		PM		AM		PM	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Intersection Overall	**0.94**	**D**	**0.91**	**D**	**0.83**	**C**	**0.79**	**C**	**0.86**	**D**	**0.89**	**D**	**0.83**	**C**	**0.79**	**C**
Eastbound Left	0.20	C	0.85	F	0.19	C	0.77	F	0.19	C	0.77	F	0.19	C	0.77	F
Eastbound Through	0.98	E	0.43	C	0.91	D	0.43	C	0.91	D	0.49	C	0.91	D	0.43	C
Eastbound Right	0.31	A	0.11	A	0.31	A	0.11	A	0.31	A	0.11	A	0.31	A	0.11	A
Westbound Left	0.86	E	0.20	C	0.56	D	0.25	E	0.56	D	0.32	E	0.56	D	0.25	E
Westbound Through	0.24	B	0.91	D	0.23	B	0.84	C	0.23	B	0.96	D	0.23	B	0.84	C
Westbound Right	0.15	A	0.28	A	0.15	A	0.28	A	0.15	A	0.28	A	0.15	A	0.28	A
Northbound Left	0.60	D	0.79	D	0.41	D	0.76	D	0.42	D	0.64	C	0.41	D	0.76	D
Northbound Through	0.30	D	0.91	E	0.21	D	0.63	D	0.26	D	0.76	D	0.21	D	0.63	D
Northbound Right	0.08	D	0.43	D	0.08	D	0.54	D	n/a	n/a	n/a	n/a	0.08	D	0.54	D
Southbound Left	0.81	E	1.00	F	0.94	E	0.73	D	1.04	F	0.86	D	0.94	E	0.73	D
Southbound Through/Right	0.98	F	0.75	E	0.63	D	0.42	D	0.64	D	0.32	D	0.63	D	0.42	D

*Cycle length and cycle splits optimized

Table 2: 2021 Traffic Operations

Movement	Do Nothing				Baseline Recommended*				Scenario 1: No NB RT Lane				Scenario 2: Shorter NB RT Lane			
	AM		PM		AM		PM		AM		PM		AM		PM	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Intersection Overall	**1.06**	**E**	**1.01**	**E**	**0.91**	**D**	**0.90**	**D**	**0.99**	**D**	**0.96**	**D**	**0.91**	**D**	**0.90**	**D**
Eastbound Left	0.23	C	0.96	F	0.22	C	0.94	F	0.24	C	0.98	F	0.22	C	0.94	F
Eastbound Through	1.01	E	0.48	C	0.97	D	0.44	C	1.04	E	0.50	C	0.97	D	0.44	C
Eastbound Right	0.35	A	0.13	A	0.35	A	0.13	A	0.35	A	0.13	A	0.35	A	0.13	A
Westbound Left	1.16	F	0.31	C	0.70	E	0.51	E	0.62	E	0.62	F	0.70	E	0.51	E
Westbound Through	0.27	B	1.05	E	0.25	B	0.92	D	0.25	B	1.05	E	0.25	B	0.92	D
Westbound Right	0.17	A	0.31	A	0.17	A	0.31	A	0.17	A	0.31	A	0.17	A	0.31	A
Northbound Left	0.69	E	0.90	D	0.44	D	0.90	E	0.47	D	0.71	D	0.44	D	0.90	E
Northbound Through	0.36	D	0.98	F	0.22	D	0.64	D	0.27	D	0.88	E	0.22	D	0.64	D
Northbound Right	0.09	D	0.59	D	0.09	D	0.72	E	n/a	n/a	n/a	n/a	0.09	D	0.72	E
Southbound Left	0.92	E	1.06	F	0.98	F	0.88	E	1.15	F	0.93	F	0.98	F	0.88	E
Southbound Through/Right	1.11	F	0.82	E	0.74	E	0.46	D	0.71	D	0.37	D	0.74	E	0.48	D

Table 3: 2031 Traffic Operations

Movement	Do Nothing				Baseline Recommended*				Scenario 1: No NB RT Lane				Scenario 2: Shorter NB RT Lane			
	AM		PM		AM		PM		AM		PM		AM		PM	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Intersection Overall	**1.22**	**F**	**1.13**	**F**	**1.02**	**E**	**1.01**	**D**	**1.09**	**E**	**1.06**	**E**	**1.02**	**E**	**1.01**	**D**
Eastbound Left	0.27	C	1.04	F	0.26	C	1.04	F	0.26	C	1.12	F	0.26	C	1.04	F
Eastbound Through	1.12	F	0.52	C	1.07	E	0.50	C	1.07	E	0.54	C	1.07	E	0.50	C
Eastbound Right	0.39	A	0.14	A	0.39	A	0.14	A	0.39	A	0.14	A	0.39	A	0.14	A
Westbound Left	1.39	F	0.37	C	0.85	E	0.60	E	0.85	E	0.62	F	0.85	E	0.59	E
Westbound Through	0.30	B	1.13	F	0.28	B	1.06	E	0.28	B	1.14	E	0.28	B	1.06	E
Westbound Right	0.18	A	0.34	A	0.18	A	0.34	A	0.18	A	0.34	A	0.18	A	0.34	A
Northbound Left	0.76	E	1.06	F	0.56	D	0.97	E	0.56	D	1.86	F	0.56	D	0.97	E
Northbound Through	0.40	D	1.09	F	0.22	D	0.71	D	0.28	D	1.01	F	0.22	D	0.71	D
Northbound Right	0.10	D	0.69	D	0.10	D	0.81	E	n/a	n/a	n/a	n/a	0.10	D	0.81	E
Southbound Left	0.99	F	1.24	F	1.10	F	0.91	E	1.32	F	1.04	F	1.10	F	0.91	E
Southbound Through/Right	1.17	F	0.98	F	0.76	E	0.47	D	0.76	E	0.42	D	0.76	E	0.47	D

Table 4: Northbound Movements - Proposed Storage and 95th Percentile Queues

Movement	Existing Storage	Do Nothing			Baseline Recommended*			Scenario 1: No NB RT Lane			Scenario 2: Shorter NB RT Lane		
		Proposed Storage (m)	AM Queue (m)	PM Queue (m)	Proposed Storage (m)	AM Queue (m)	PM Queue (m)	Proposed Storage (m)	AM Queue (m)	PM Queue (m)	Proposed Storage (m)	AM Queue (m)	PM Queue (m)
Existing													
Northbound Through	75*	75*	45	180#	115**	20	65	115**	20	95	115**	20	65
Northbound Right	75	75	15	60	105 m storage (60 m taper)	12	55	No dedicated lane – 0 m	N/A	N/A	26 m storage (44 m taper)	12	55
2021													
Northbound Through	75*	75*	50	215#	115**	25	80	115**	25	140	115**	25	80
Northbound Right	75	75	15	90	105 m storage (60 m taper)	15	90	No dedicated lane – 0 m	N/A	N/A	26 m storage (44 m taper)	15	90
2031													
Northbound Through	75*	75*	55	250#	115**	30	95	115**	30	185#	115**	30	95
Northbound Right	75	75	15	105	105 m storage (60 m taper)	15	110#	No dedicated lane – 0 m	N/A	N/A	26 m storage (44 m taper)	15	110#

*Through movement storage measured as distance to first driveway where it will block left-turn movements (existing Sheraton driveway – 75 m)
**Through lane storage measured as distance to re-located Sheraton driveway, 115 m south of the intersection
#Synchro output for queues is based upon a probability distribution; there is a small probability that queues will slightly exceed this length in some instance

Appendix G

Northbound Left-Turn Lane and Accesses

Memo – Northbound Left-Turn Lane

Project: Derry / Argentia EA
Subject: **Northbound Left-Turn Lane**
To: Sally Rook – Region of Peel
From: Tony Reitmeier – HDR
Andrew O'Connor – HDR
Date: Thursday, December 4, 2014

The purpose of this memo is to outline design concepts considered for accesses to Argentia Road south of Derry Road.

During the development of the preliminary design, HDR proposed some modifications to accesses to Argentia Road south of Derry Road:

- Convert existing Sheraton Hotel access to "Right-in/Right-out"
- Provide a second full-moves access to the Sheraton Hotel at the south edge of their site
- Convert proposed First Gulf access to "Right-in/Right-out/Left-in"

The re-location of the accesses was proposed for the following reasons:

- Enable improved traffic operations at the intersection of Derry Road and Argentia Road
- Improve safety at the driveway to the Sheraton hotel and the proposed First Gulf development
- Access control

Traffic Operations on Argentia Road
Modifying the accesses would allow for a longer left-turn lane providing additional storage for vehicles making a northbound left-turn. The Synchro results for the northbound movements are shown below in **Table 1**.

Table 1: Queue Lengths

Movement	Existing Distance Available for Queuing (m)	2011 – 95th Percentile Queue (m)		2021 – 95th Percentile Queue (m)		2031 – 95th Percentile Queue (m)	
		AM	PM	AM	PM	AM	PM
NBL	60	20	75	25	80*	25	115*
NBT	75	20	75	25	80	25	95
NBR	75	15	65	15	90	15	110*

*Synchro output for queues is based upon a probability distribution; there is a small probability that queues will slightly exceed this length in some instances

The Sheraton driveway limits the existing northbound left turn lane to a storage length of 60 m. Adding a "full moves" driveway to the south can allow for an extended northbound left-turn lane that provides a storage length of 100 m. The Synchro modelling results indicate that storage lengths beyond the existing 60 m length are required during the PM Peak Hour under existing conditions, 2021 conditions and 2031 conditions.

Shifting the "full-moves" access to the south also reduces the extent of queues in the through lane or the right-turn lane blocking the access to the site.

Safety and Operations at the Sheraton Driveway
Adding a "full moves" access to the south will allow for improved operations at the Sheraton driveway. Vehicles will be able to turn into and out of the driveway more easily, because queues on Argentia Road will be less likely to block the driveway.

Shifting the access is also expected to improve safety performance at the driveway. Six out of the 82 collisions (7.3%) reported at the intersection of Derry Road and Argentia Road over the 5 year assessment period (2008 to 2012) took place specifically at the Sheraton driveway (refer to **Figure 1**). There were 5 left-turn collisions and 1 rear end collision. It is likely that the left-turn collisions were the result of the congestion and queuing on Argentia Road. Restricting the existing driveway to "Right-in/Right-out" and adding a "full moves" driveway further to the south is expected to improve the safety performance at the driveway.

A conceptual design of the proposed second access at the Sheraton hotel site is provided as **Figure 2**.

Access Control
The original First Gulf Corporation development application for 2476 Argentia Road (the site at the southwest corner of Derry Road and Argentia Road) included a full moves access directly across from the existing Sheraton Hotel access. Vehicles making left turns out of this site would have difficulty making the turn during the PM Peak when there are vehicle queues on Argentia Road. By restricting the access to "Right-in/Right-out/Left-in", all vehicles would make a right-turn to exit the site. This would reduce the number of conflicting turning movement and queues near to the intersection of Derry Road and Argentia Road.

The Traffic Impact Study completed for this development forecast that 86% (or 150 out of 175 vehicles) would turn right out of the driveway instead of turning left. The study notes that "site traffic was assigned to the network acknowledging the prevailing capacity constraints at the Derry Road / Argentia Road intersection", indicating that vehicles turn right instead of left as a result of the queues on Argentia Road. Therefore, restricting the "left-out" move would only impact a small number of vehicles.

Final Design
Through consultation with the Sheraton Hotel, they indicated support for the proposed design, which would include the construction of a "full moves" access at the south side of the property and the conversion of their existing access to "Right-in/Right-out". This recommendation is reflected in the preliminary design.

Through consultation with First Gulf, they indicated that they did not support the restriction of their access to "Right-in/Right-out/Left-in". Working with the City of Mississauga, the site plan for First Gulf was amended to reflect a re-location of their driveway to the southern-most limit of their property, to maximize the unimpeded storage of the northbound lanes on

Argentia Road. The driveway will be designed to permit full moves, but signage is recommended to restrict "left-out" movements during the PM Peak period when conflicts with queued vehicles are expected. This change is reflected in the preliminary design.

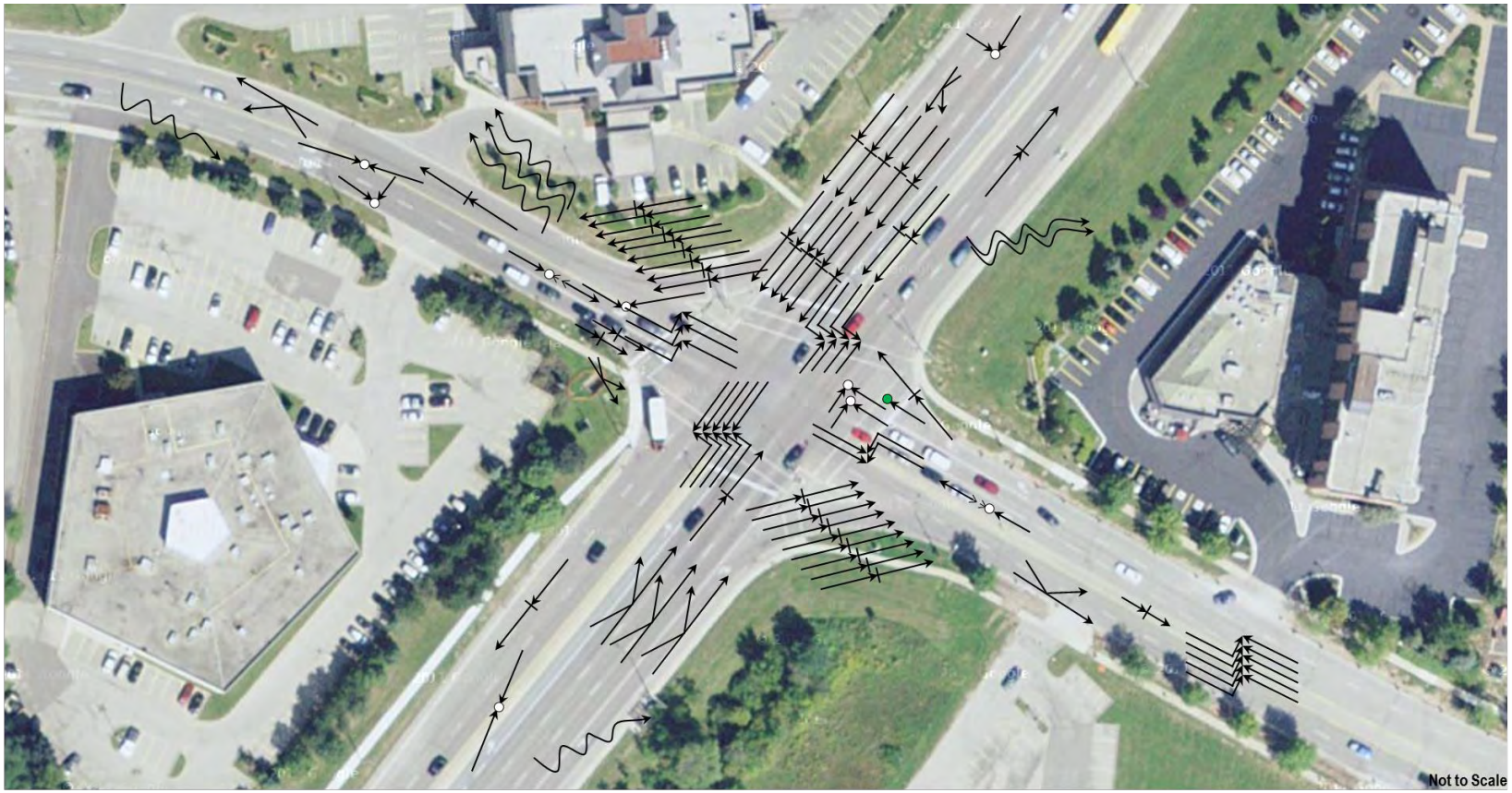


Figure 1: Collision Locations within Intersection of Derry Road and Argentia Road

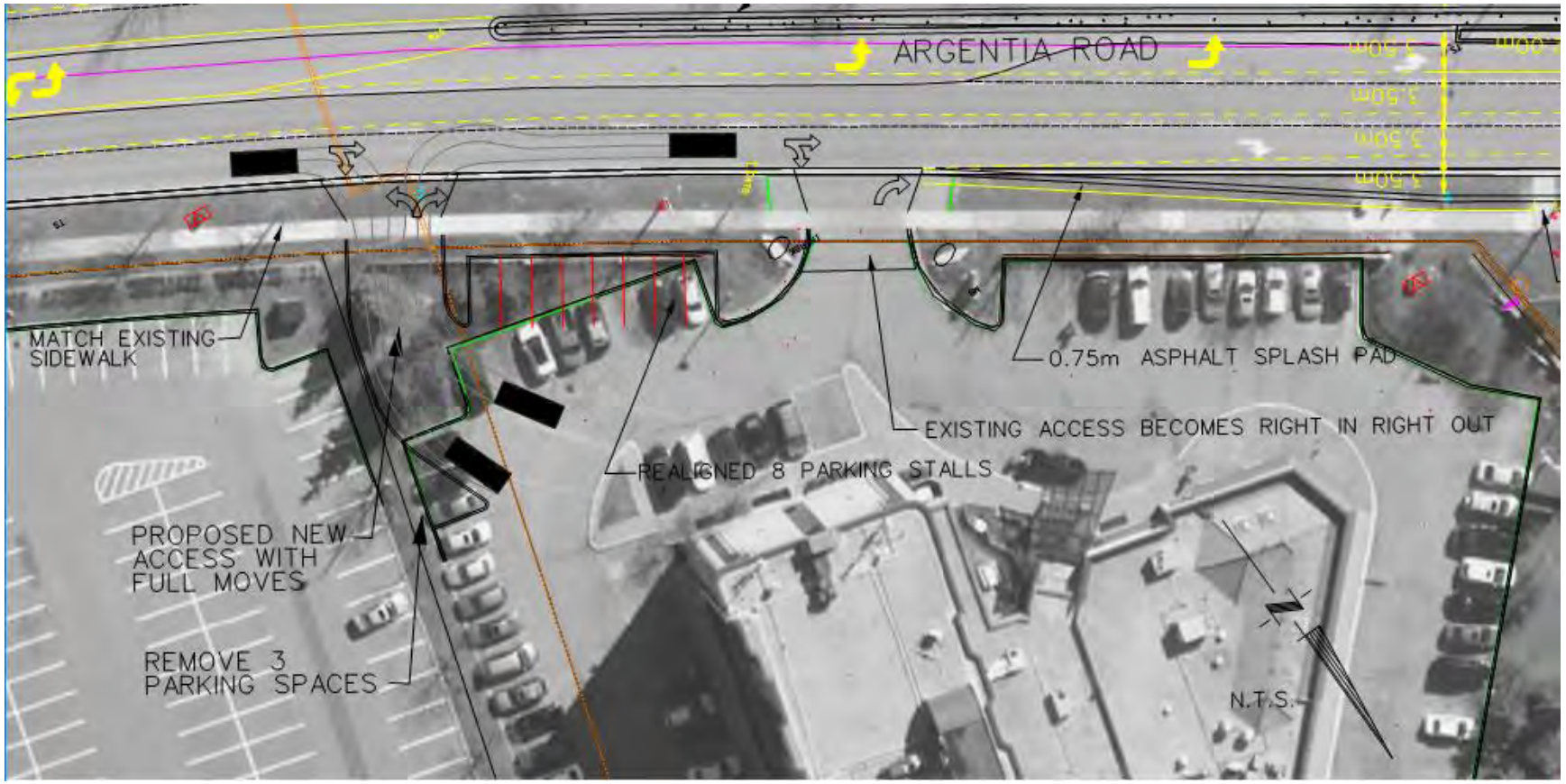


Figure 2: Conceptual Design of Sheraton Second Access

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