

**Proposed
Residential Estate
Wyee Point
Traffic Impact Study**

Prepared by

Northern Transport Planning and Engineering Pty Ltd

A.B.N. 79 056 088 629

September 2009

091591

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1. INTRODUCTION

This report provides an assessment of the Traffic Impact of a proposed residential development of between 150 and 250 lots at Wyee Point. The initial assessment detailed in this report is for the development of 150 lots. A further assessment has also been carried out to determine the Traffic Impact of a 250 lot development.

2. SITE

The subject site is comprised of the following allotments, the majority of which are part of an unformed 'paper subdivision'.

- More than 600 lots in Sections A-V of DP 1596
- Lot 1 DP 124592

The site is 38 hectares in size. It is assumed that part of the site will remain zoned for conservation purposes. Based on this, it is estimated that if the site is rezoned to residential then approximately 15-250 dwellings may be constructed. This will depend on the outcomes of the environmental studies. This report will assess the capacity of the network for both and additional 150 and 250 lots.

3. ACCESS

This indicative 150 lot subdivision layout shows that access to the new residential lots would be via both Bay Street and High Street. These access arrangements will be used for the assessment of the Traffic Impact of the proposed residential development.

There is also the potential for a third access to be provided off Larapinta Drive. However, this will depend on negotiations with other property owners.

4. EXISTING TRAFFIC

Intersection Counts

Surveys have been carried out at the following intersections:

Intersection	Date of Survey	Time of Survey	
Bay St / Government Rd	3/5/2009	AM	Figure 4-1
	4/5/2009	PM	Figure 4-1
High St / Government Rd	3/5/2009	AM	Figure 4-2
	4/5/2009	PM	Figure 4-2
Brigade St / Government Rd	3/5/2009	AM	Figure 4-3
	4/5/2009	PM	Figure 4-3
Rutleys Rd / Government Rd	3/5/2009	AM	Figure 4-4
	4/5/2009	PM	Figure 4-4

A full report of these intersection counts is attached as Appendix A.

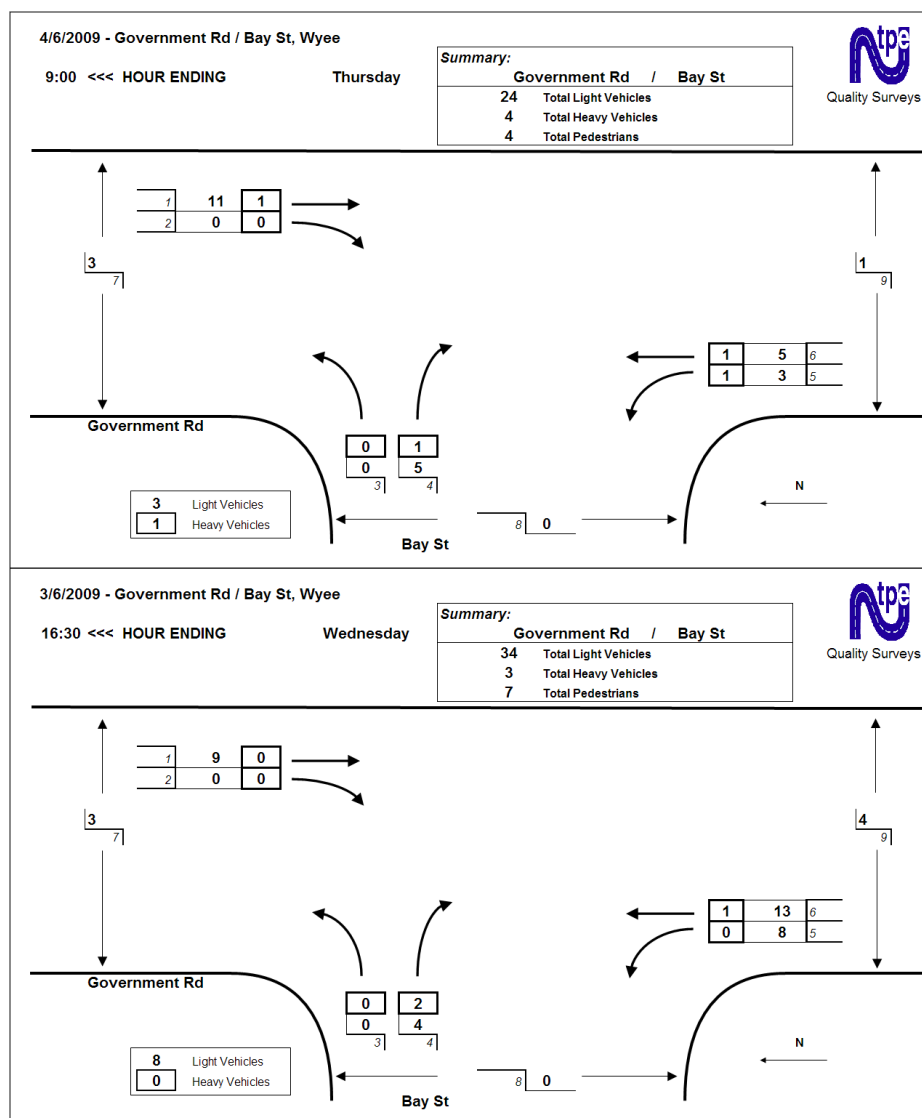


Figure 4-1: Bay St / Government Rd – Existing AM and PM Peak Hour Flows

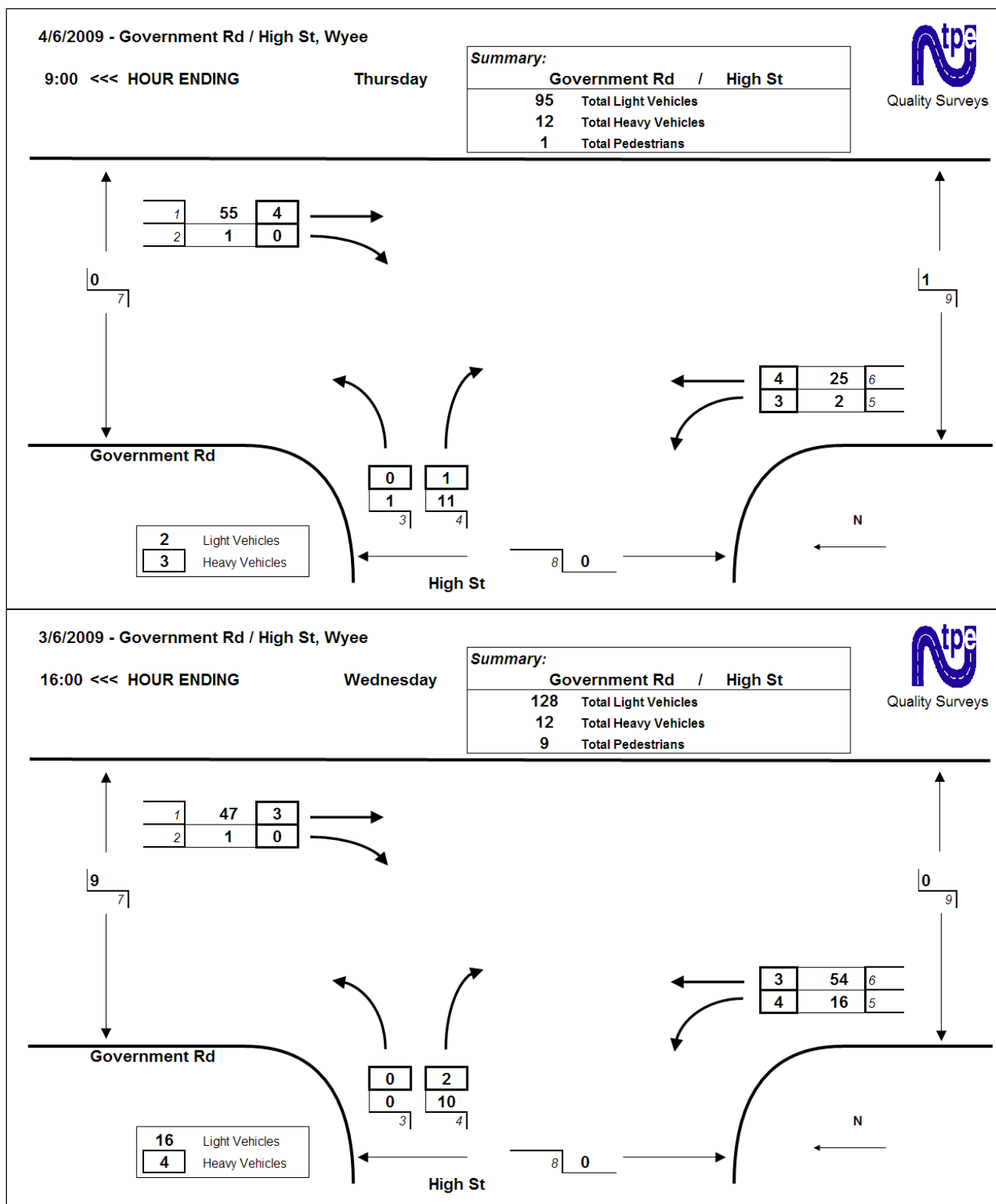


Figure 4-2: High Street / Government Rd – Existing AM and PM Peak Hour Flows

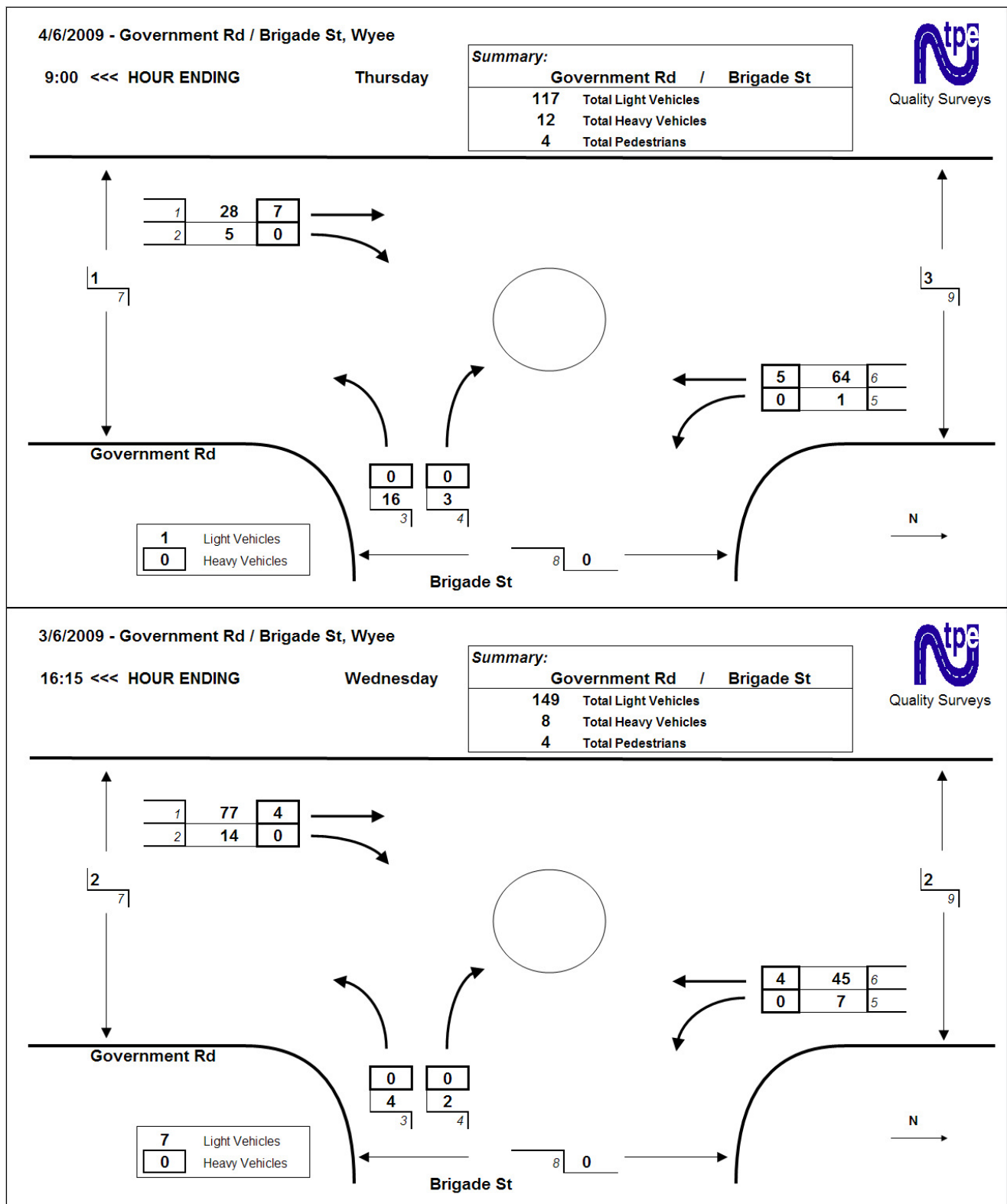


Figure 4-3: Brigade Street / Government Rd – Existing AM and PM Peak Hour Flows

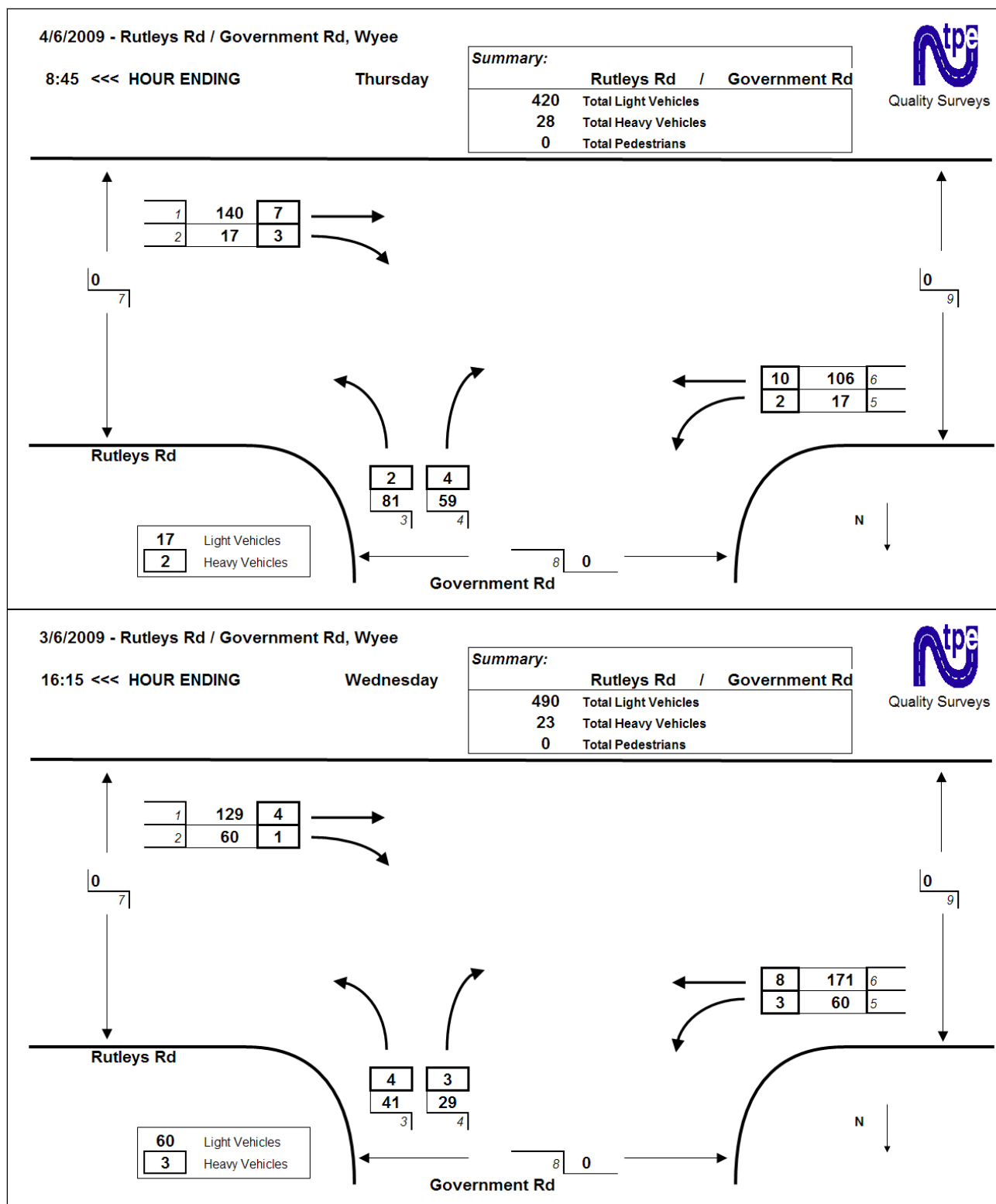


Figure 4-4: Rutleys Rd / Government Rd – Existing AM and PM Peak Hour Flows

Automatic Vehicle Counts

Automatic Vehicle counts were carried out at the following sites:

Road	Location
Bay St	west of Government Rd
High St	west of Government Rd
Government Rd	South of Brigade St
Government Rd	North of Rutleys Rd

A summary of the results of this survey are presented in Table 4-1 below:

Table 4-1: Average Week Day Traffic Flows

<i>Street</i>		<i>Direction</i>	<i>AM Peak 8am-9am</i>	<i>PM Peak 3pm-4pm</i>	<i>Daily</i>
Bay St	West of Government Rd	Eastbound	8	4	66
		Westbound	3	8	60
		Total	11	12	126
High St	West of Government Rd	Eastbound	12	7	102
		Westbound	4	7	104
		Total	16	14	206
Government Rd	South of Brigade St	Northbound	30	62	565
		Southbound	76	36	579
		Total	106	98	1144
Government Rd	North of Rutleys Rd	Northbound	35	91	832
		Southbound	117	53	900
		Total	152	144	1732

A full report on the results of these automatic vehicle counts are attached as Appendix B.

5. DESIGN HOUR

Both AM and PM peak hours will be assessed as part of this study.

A review of the results for the intersection indicates that the peak hour varied between 9am and 8.45am, while the PM peak hour varied between 4pm and 4.30pm. The automatic count result in general show the AM and PM peak hours to be ending at 9am and 5pm respectively.

Accordingly, the following peak hours have been adopted for assessing the impact of the proposed development on the surrounding road network.

AM Peak Hour	8:00AM to 9:00AM
PM Peak Hour	4:00PM to 5:00PM

6. TRIP GENERATION OF PROPOSED DEVELOPMENT

RTA Guide to Traffic Generating Developments recommends that the daily trip generation from residential blocks should be:

	Daily	Peak Hour
Dwelling Houses	9	0.85

The RTA trip generation rates have been used to derive predicted trip generation from the proposed residential estate. The proposed development will provide between 150 and 250 residential lots. The trips generated by the development are presented in Table 6-1 below:

Table 6-1: Predicted Trip Generation: Proposed Full Development

<i>Lots</i>	<i>Daily Rate / Dwelling</i>	<i>Peak Hour Rate / Dwelling</i>	<i>Daily Trips</i>	<i>Peak Hour Trips</i>
150	9	0.85	1350	128
250	9	0.85	2250	213

7. TRIP DISTRIBUTION OF PROPOSED 150 LOT DEVELOPMENT

The trips generated by the proposed development have been distributed onto the local road network as detailed below in Figure 7-1:

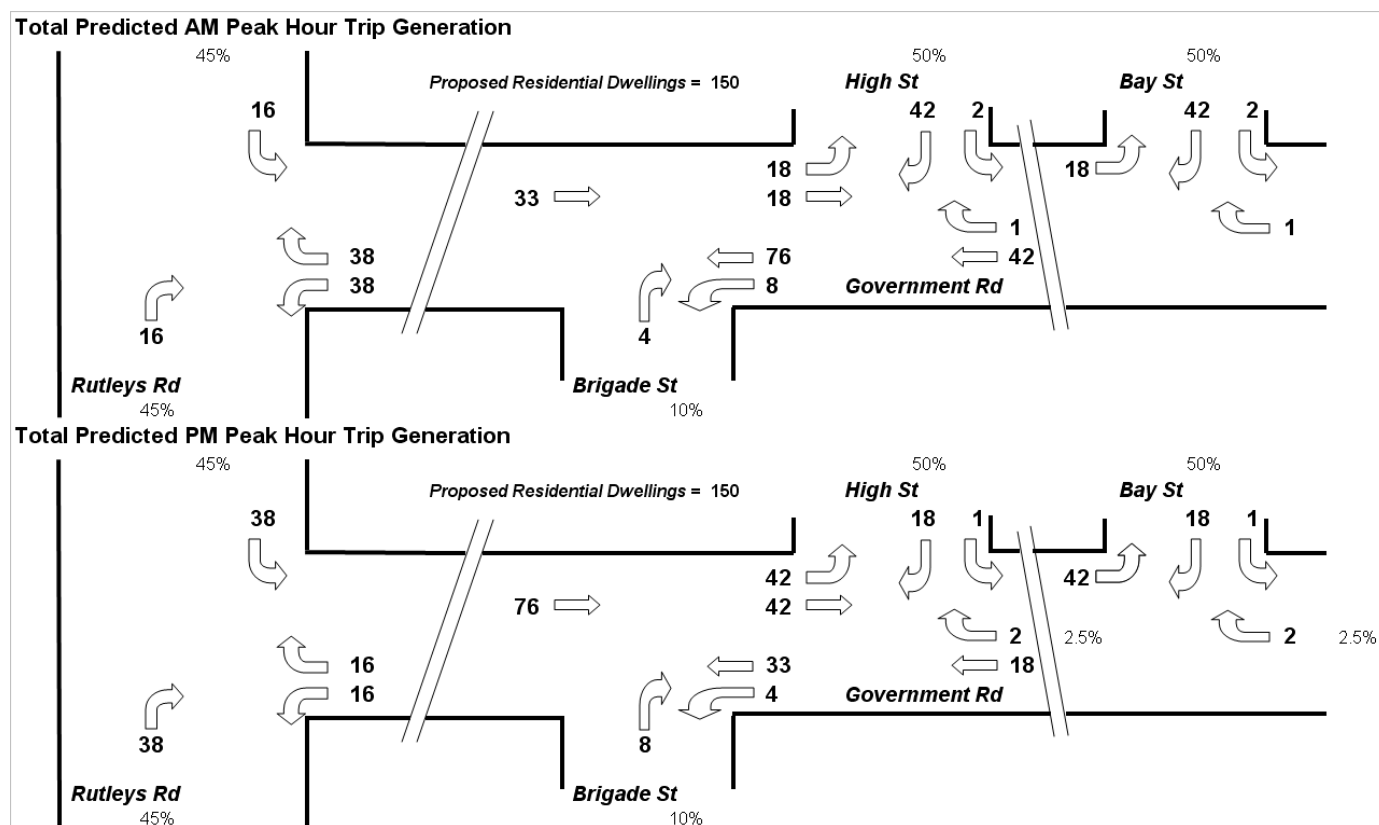


Figure 7-1: Trip Distribution of Proposed Full Development (150 Lots)

8. PREDICTED 2019 PEAK HR TRAFFIC FLOWS – 150 LOT DEVELOPMENT

Existing traffic flows have been combined with trips predicted to be generated by the proposed development of 150 lots to derive predicted peak hour traffic flows. An annual growth factor of 3% has been applied to existing traffic flows. The predicted 2019 peak hour traffic flows are presented in Figure 8-1 below:

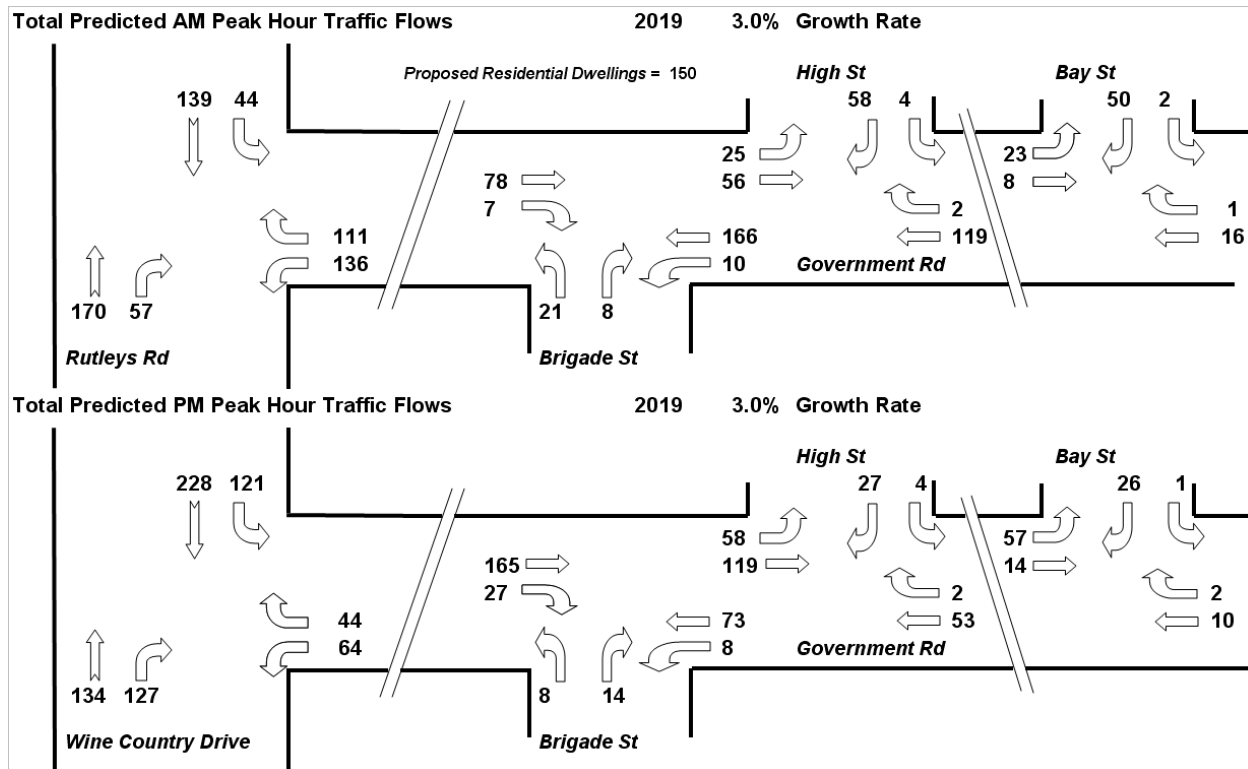


Figure 8-1: Predicted 2019 Peak Hour Traffic Flows – Development 150 Lots.

9. SIDRA ANALYSIS

The simulation model SIDRA has been used to assess the performance of the following intersections:

1. Rutleys Rd / Government Rd
2. Brigade St / Government Rd
3. High St / Government Rd
4. Bay St / Government Rd

Level of Service at an intersection is based on the average delay per vehicle and can be applied to both an individual movement and the entire intersection. The concept is the same for both signalised and unsignalised intersections. Levels of service are ranked for A to F as summarised below in Table 9-1.

Table 9-1: Intersection Level of Service Performance Categories

	Control Delay per Vehicle	
Level of Service	All Intersection Types	Description
A	$d \leq 14.5$	Excellent
B	$14.5 < d \leq 28.5$	Very Good
C	$28.5 < d \leq 42.5$	Good
D	$42.5 < d \leq 56.5$	Acceptable
E	$56.5 < d \leq 70.5$	Poor
F	$70.5 < d$	Very Poor

The predicted 2019 traffic flows have been assessed using the existing intersection layouts.

A full report of the SIDRA Analysis for 150 Lots is attached as Appendix C

10. SUMMARY OF SIDRA RESULTS – 150 LOT DEVELOPMENT

A summary of results of the SIDRA Analysis for the worst movement for each of the intersection runs is presented below in Table 10-1:

Table 10-1: SIDRA Analysis – Worst Turning Movement (150 Lot Development)

SIDRA Analysis - Worst Turning Movement (150 Lot Development)														
Intersection	Peak	Movement Performance - Vehicles										Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Mov ID	Turn	Demand	Deg.	Average	Level of	95% Back of Queue	Distance m					
				Flow veh/h	HV %	Satn v/c	Delay sec	Service		Vehicles veh				
Rutleys Rd / Government Rd														
	AM	6	R	111	2	0.349	14.1	LOS B	1.3	9.2	0.56	0.85	43.1	
	PM	6	R	44	2	0.164	15.5	LOS C	0.5	3.8	0.61	0.86	41.8	
Brigade St / Government Rd														
	AM	3	R	8	1	0.028	11.9	LOS B	0.2	1.3	0.36	0.69	45.5	
	PM	3	R	14	1	0.018	11.2	LOS B	0.1	0.8	0.23	0.66	45.7	
High Street / Government Rd														
	AM	6	R	2	1	0.063	15.9	LOS C	0.5	3.3	0.2	1.48	43.4	
	PM	6	R	2	1	0.029	16	LOS C	0.2	1.6	0.31	1.34	43.6	
Bay Street / Government Rd														
	AM	6	R	1	1	0.009	15.2	LOS C	0.1	0.4	0.11	1.51	43.5	
	PM	6	R	2	1	0.007	14.3	LOS B	0	0.3	0.17	1.26	44.3	

A full report of the SIDRA Analysis for 150 Lots is attached as Appendix C

Discussion

The SIDRA results reported above indicate that these four intersections will perform satisfactorily in year 2019 with their existing layouts for a 150 Lot residential development.

A further assessment for a 250 lot development is detailed below.

11. PREDICTED 2019 PEAK HR TRAFFIC FLOWS – 250 LOT DEVELOPMENT

Existing traffic flows have been combined with trips predicted to be generated by the proposed development of 250 lots to derive predicted peak hour traffic flows. An annual growth factor of 3% has been applied to existing traffic flows. The predicted 2019 peak hour traffic flows are presented in Figure 11-1 below:

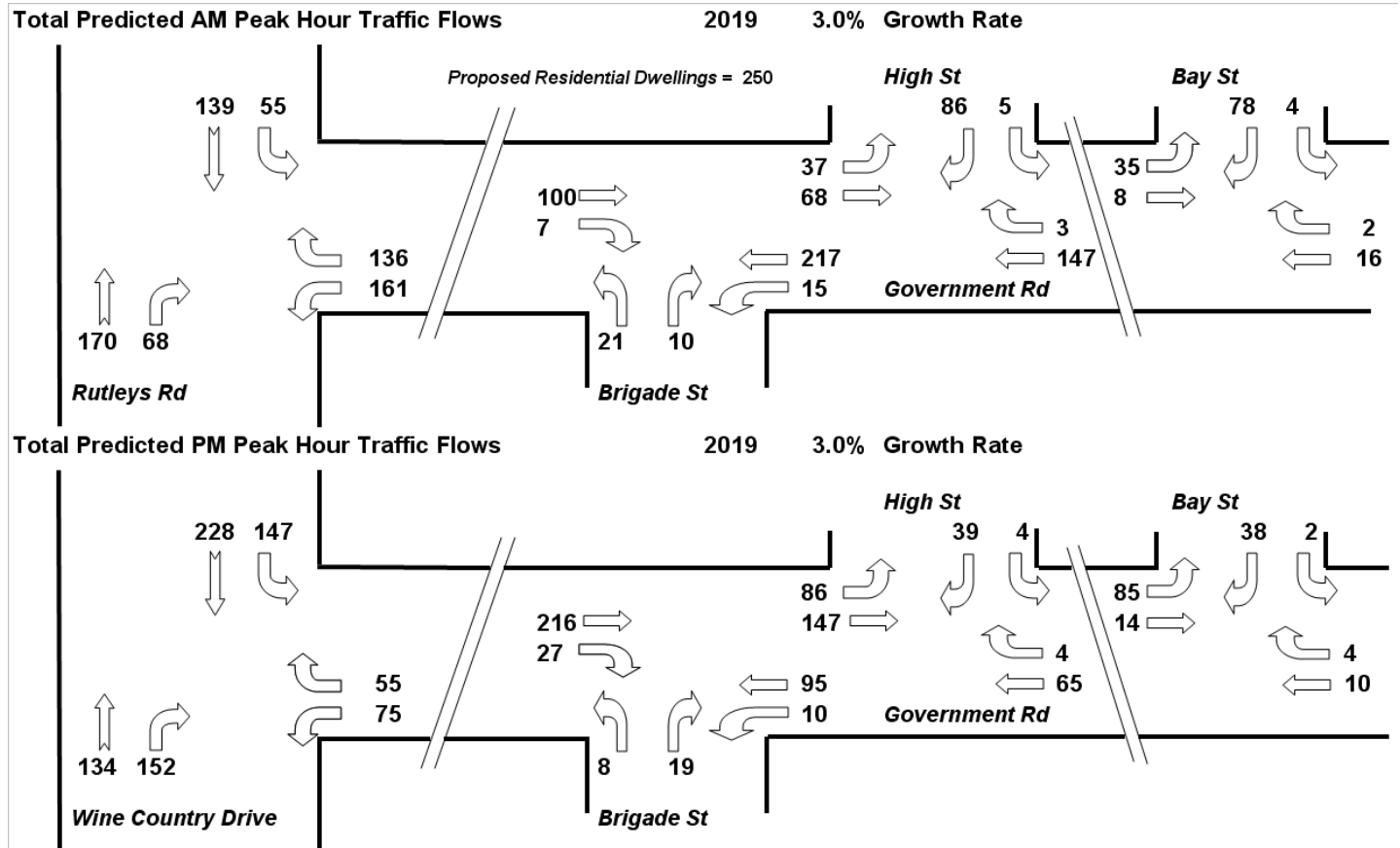


Figure 11-1: Predicted 2019 Peak Hour Traffic Flows – Development 250 Lots.

12. SUMMARY OF SIDRA RESULTS – 250 LOT DEVELOPMENT

A summary of results of the SIDRA Analysis for the worst movement for each of the intersection runs is presented below in Table 12-1:

Table 12-1: SIDRA Analysis –Worst Turning Movement (250 Lot Development)

SIDRA Analysis - Worst Turning Movement (250 Lot Development)														
Intersection	Peak	Movement Performance - Vehicles										Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Mov ID	Turn	Demand	Deg.	Average	Level of	95% Back of Queue	Distance					
				Flow veh/h	HV %	Satn v/c	Delay sec	Service		Vehicles veh				
Rutleys Rd / Government Rd														
	AM	6	R	136	2	0.435	15.5	LOS C	1.8	13	0.59	0.91	41.9	
	PM	6	R	55	2	0.213	16.7	LOS C	0.7	5.1	0.64	0.88	40.9	
Brigade St / Government Rd														
	AM	3	R	11	1	0.031	12.1	LOS B	0.2	1.5	0.41	0.68	45.4	
	PM	3	R	19	1	0.023	11.3	LOS B	0.2	1.1	0.27	0.65	45.6	
High Street / Government Rd														
	AM	6	R	3	1	0.079	15.9	LOS C	0.6	4.2	0.24	1.44	43.5	
	PM	6	R	4	1	0.037	16.1	LOS C	0.3	2.1	0.36	1.27	43.7	
Bay Street / Government Rd														
	AM	6	R	2	1	0.01	14.7	LOS B	0.1	0.4	0.13	1.39	43.9	
	PM	6	R	4	1	0.008	13.2	LOS B	0.1	0.4	0.2	1.08	45.1	

A full report of the SIDRA Analysis for 250 Lots is attached as Appendix D.

Discussion

The SIDRA results reported above indicate that these four intersections will perform satisfactorily in year 2019 with their existing layouts for a 250 Lot residential development.

A full report of the SIDRA Analysis is attached as Appendix D.

13. ENVIRONMENTAL CAPACITY – 250 LOT DEVELOPMENT

The “Environmental Capacity” of a road has been defined as:

The Maximum number of vehicles that should be permitted to pass through a given environment situation over time and under prevailing environmental conditions. The capacity should not normally be exceeded without changing one or more conditions that prevail. (Sharpe and Maxwell, 1972)

Reproduced below is a copy of a table included in AMCORD URBAN – Edition 1992, which quantifies the Environmental Capacity for residential streets:

Table 13-1: Recommended Environmental Capacity Performance Standards on Residential Street

<i>Street Type</i>	<i>Max. speed Km/h</i>	<i>Max. peak hour Environmental goal</i>	<i>Volume (veh / hour) Maximum</i>
Access street	30-40	n.a.	100
Access Street*	40-50	200	300
Collector	40-60	300	500

*with footpath

After Hallam and Stapleton 1992.

NOTE: The naming of street types has been adopted to conform to the descriptions used in AMCORD and AMCORD URBAN. The upper limits for maximum speed on Access Streets are higher than those specified in AMCORD.

Based on existing road function and layout it is considered that Bay Street and High Street perform as access streets with an environmental capacity of 300 veh / hour, while Government Road performs as a collector rd with an environmental capacity of 500 veh / hour.

Table 13-2: Environmental Capacity Summary Year 2019 – 250 Lot Development (vehicles per hr)

Section		Class	AMCORD	Peak Hour Traffic Flow
Bay St	West of Government Road	Access Rd	300	129
High Street	West of Government Road	Access Rd	300	134
Government Rd	South of Bay St	Collector Rd	500	194
Government Rd	South of High St	Collector Rd	500	328

This assessment of Environmental Capacity shows that the predicted traffic volumes on these sections of road directly affected by the proposed residential development are within the AMCORD limits for the relevant road class with the development of up to 250 Lots by year 2019.

14. CONCLUSION

Based on this assessment of predicted traffic impacts it is considered that a development of up to 250 Residential Lots within the proposed estate can be undertaken in accordance with the results presented in this assessment.

Appendix A:

Intersection Counts

Bay St / Government Rd

High St / Government Rd

Brigade St / Government Rd

Rutleys Rd / Government Rd

4/6/2009 - Government Rd / Bay St, Wyee

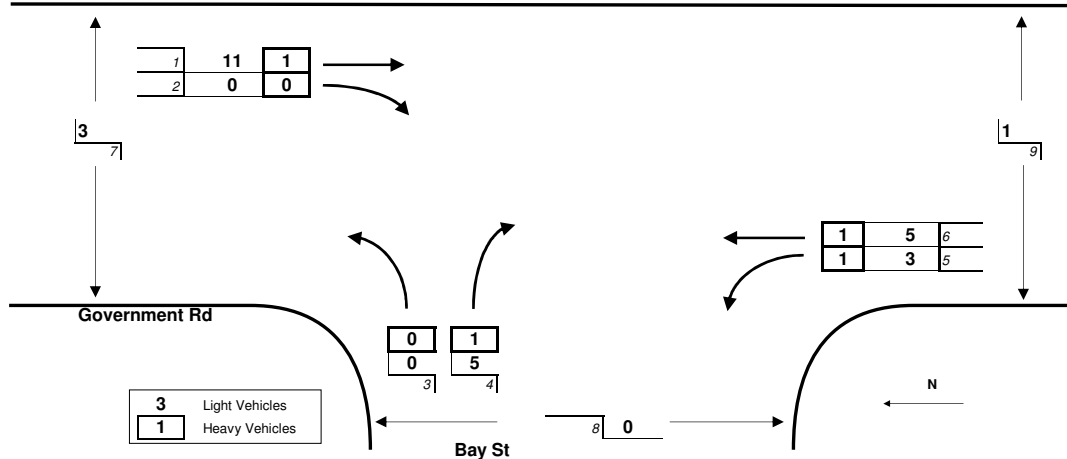
9:00 <<< HOUR ENDING

Thursday

Summary:

Government Rd / Bay St

24 Total Light Vehicles
4 Total Heavy Vehicles
4 Total Pedestrians



4/6/2009 - Government Rd / Bay St, Wyee

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6	15 MIN HOUR				7	8	9
07:15	0	0	0	0	0	0	0			0	0	0
07:30	0	0	0	0	0	0	0			0	0	0
07:45	1	0	0	0	0	0	1			0	0	0
08:00	0	0	0	0	0	1	1	2		0	0	0
08:15	3	0	0	1	1	1	6	8		1	0	0
08:30	3	0	0	1	1	2	7	15		1	0	0
08:45	3	0	0	3 <	0	2 <	8	22		0	0	1
09:00	2 <	0	0	0 <	1 <	0	3	24 <		1	0	0

Heavy Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	1	1		
07:30	0	0	0	0	0	0	0		
07:45	0	0	0	0	0	0	0		
08:00	0	0	0	0	0	0 <	0	1	
08:15	0	0	0	0	0	0	0	0	
08:30	1 <	0	0	0	1 <	0	2	2	
08:45	0 <	0	0	0	0 <	0	0	2	
09:00	0 <	0	0	1 <	0 <	1 <	2	4 <	

All Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	1	1		
07:30	0	0	0	0	0	0	0		
07:45	1	0	0	0	0	0	1		
08:00	0	0	0	0	0	1	1	3	
08:15	3	0	0	1	1	1	6	8	
08:30	4	0	0	1	2	2	9	17	
08:45	3	0	0	3	0	2 <	8	24	
09:00	2 <	0	0	1 <	1 <	1 <	5	28 <	

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

3/6/2009 - Government Rd / Bay St, Wyee

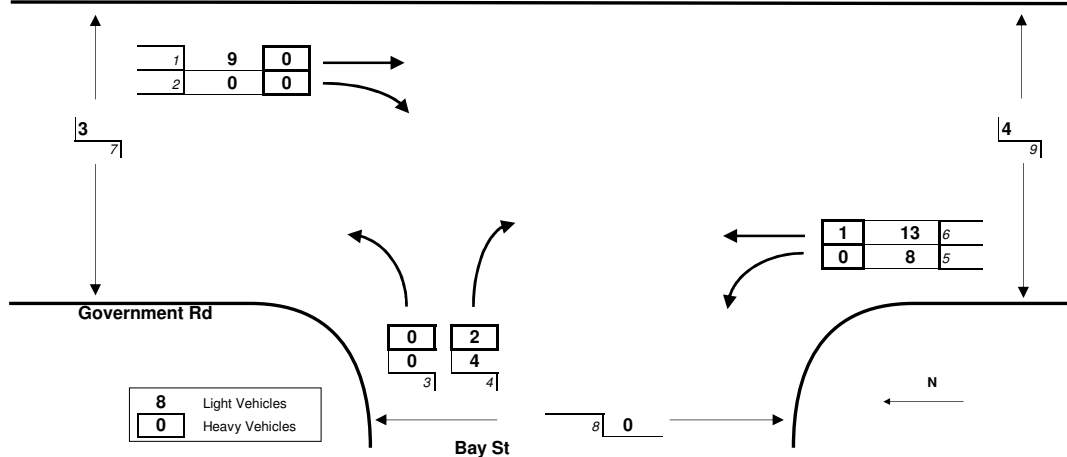
16:30 <<< HOUR ENDING

Wednesday

Summary:

Government Rd / Bay St

34 Total Light Vehicles
3 Total Heavy Vehicles
7 Total Pedestrians



3/6/2009 - Government Rd / Bay St, Wyee

Light Vehicles						Total Vehicles		Pedestrians		
1	2	3	4	5	6	15 MIN HOUR		7	8	9
15:15	2	0	0	1	5	0	8	0	0	0
15:30	2	0	0	3	1	4	10	0	0	0
15:45	1	0	0	1	2	4	8	1	0	0
16:00	3	0	0	2 <	2	4	11	1	0	0
16:15	3	0	0	0	3	4 <	10	0	0	2
16:30	2	0	0	1	1	1	5	1	0	2
16:45	3 <	0	0	2	3	5	13	0	0	2
17:00	0	0	0	1	4 <	1	6	0	0	0
17:15	3	0	0	0	1	2	6	0	0	0
17:30	1	0	0	0	3 <	2	6	0	0	0

Heavy Vehicles						Total Vehicles	
1	2	3	4	5	6	15 MIN HOUR	
15:15	0	0	0	1	0	0	1
15:30	0	0	0	1	1	0	2
15:45	0	0	0	1	0	1	2
16:00	0	0	0	0 <	0 <	0 <	5 <
16:15	0	0	0	1 <	0 <	0 <	5 <
16:30	0	0	0	0	0	0 <	3
16:45	0	0	0	1	0	0	1
17:00	0	0	0	0	0	0	2
17:15	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	1

All Vehicles						Total Vehicles	
1	2	3	4	5	6	15 MIN HOUR	
15:15	2	0	0	2	5	0	9
15:30	2	0	0	4	2	4	12
15:45	1	0	0	2	2	5	10
16:00	3	0	0	2 <	2 <	4	11
16:15	3	0	0	1	3	4 <	11
16:30	2	0	0	1	1	1	5
16:45	3 <	0	0	3	3	5	14
17:00	0	0	0	1	4 <	1	6
17:15	3	0	0	0	1	2	6
17:30	1	0	0	0	3 <	2	6

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

4/6/2009 - Government Rd / High St, Wyee

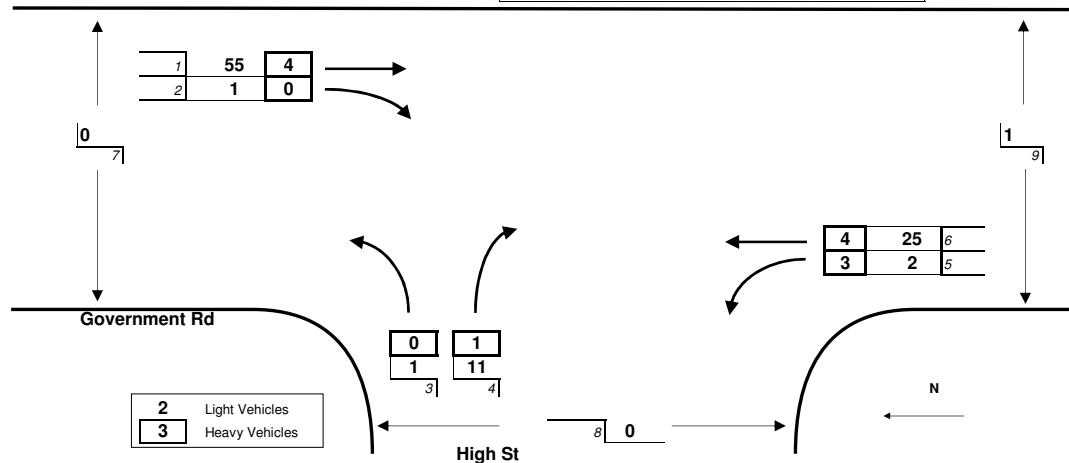
9:00 <<< HOUR ENDING

Thursday

Summary:

Government Rd / High St

95 Total Light Vehicles
12 Total Heavy Vehicles
1 Total Pedestrians



4/6/2009 - Government Rd / High St, Wyee

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6	15 MIN HOUR				7	8	9
07:15	0	0	0	0	0	0	0			0	0	1
07:30	8	0	0	2	0	8	18			0	0	0
07:45	14	0	0	4	0	2	20			0	0	0
08:00	8	0	0	5	0	8	21	59		1	0	2
08:15	15	0	0	2	1	2	20	79		0	0	1
08:30	16	0	1 <	4 <	0	8	29	90		0	0	0
08:45	17 <	0	0 <	2	1	7	27	97 <		0	0	0
09:00	7	1 <	0 <	3	0	8	19	95		0	0	0

Heavy Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	0	0		
07:30	2	0	0	0	2	0	4		
07:45	1	0	0	0	1	0	2		
08:00	0	0	0	0	0 <	1	1	7	
08:15	0	0	0	0	0 <	2	2	9	
08:30	3	0	0	1 <	1	1 <	6	11	
08:45	0	0	0	0 <	0	0 <	0	9	
09:00	1	0	0	0 <	2 <	1 <	4	12 <	

All Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	0	0		
07:30	10	0	0	2	2	8	22		
07:45	15	0	0	4	1	2	22		
08:00	8	0	0	5	0	9	22	66	
08:15	15	0	0	2	1	4	22	88	
08:30	19	0	1 <	5 <	1	9	35	101	
08:45	17	0	0 <	2	1	7 <	27	106	
09:00	8	1 <	0 <	3	2 <	9 <	23	107 <	

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

3/6/2009 - Government Rd / High St, Wyee

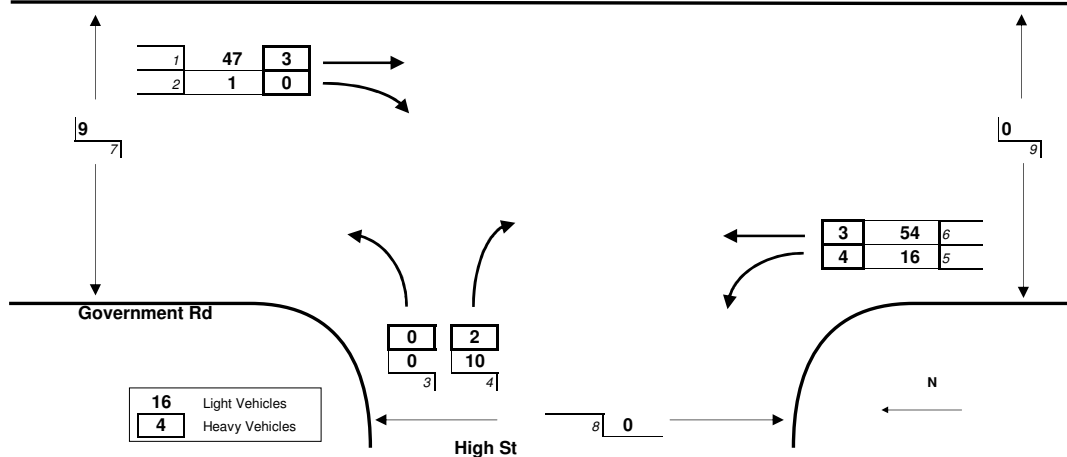
16:00 <<< HOUR ENDING

Wednesday

Summary:

Government Rd / High St

128 Total Light Vehicles
12 Total Heavy Vehicles
9 Total Pedestrians



3/6/2009 - Government Rd / High St, Wyee

Light Vehicles						Total Vehicles		Pedestrians		
1	2	3	4	5	6	15 MIN HOUR		7	8	9
15:15	12	0	0	2	4	10	28	1	0	0
15:30	11	0	0	3	7	17	38	1	0	0
15:45	12	0	0	2	0	16	30	5	0	0
16:00	12 <	1 <	0	3 <	5 <	11	32 128	2	0	0
16:15	9	0 <	0	2 <	4 <	17 <	32 132 <	1	0	0
16:30	2	0 <	1	1	1	9	14 108	1	0	0
16:45	8	0 <	0	1	1	18	28 106	1	0	0
17:00	6	0	1	2	4	15	28 102	0	0	0
17:15	12	0	1 <	1	1	14	29 99	0	0	0
17:30	4	0	0	2	6	14 <	26 111	0	0	0

Heavy Vehicles						Total Vehicles	
1	2	3	4	5	6	15 MIN HOUR	
15:15	1	0	0	1	2	1	5
15:30	1	0	0	0	1	0	2
15:45	1	0	0	1	1	1	4
16:00	0 <	0	0	0 <	0 <	1 <	1 12 <
16:15	1 <	0	0	0	0	0	1 8
16:30	0	0	0	0	0	0	0 6
16:45	1	0	0	1	2	0	4 6
17:00	0	0	0	0	0	0	0 5
17:15	0	0	0	0	0	0	0 4
17:30	0	0	0	0	0	0	0 4

All Vehicles						Total Vehicles	
1	2	3	4	5	6	15 MIN HOUR	
15:15	13	0	0	3	6	11	33
15:30	12	0	0	3	8	17	40
15:45	13	0	0	3	1	17	34
16:00	12 <	1 <	0	3 <	5 <	12	33 140 <
16:15	10	0 <	0	2	4	17 <	33 140 <
16:30	2	0 <	1	1	1	9	14 114
16:45	9	0 <	0	2	3	18	32 112
17:00	6	0	1	2	4	15	28 107
17:15	12	0	1 <	1	1	14	29 103
17:30	4	0	0	2	6	14	26 115

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

4/6/2009 - Government Rd / Brigade St, Wyee

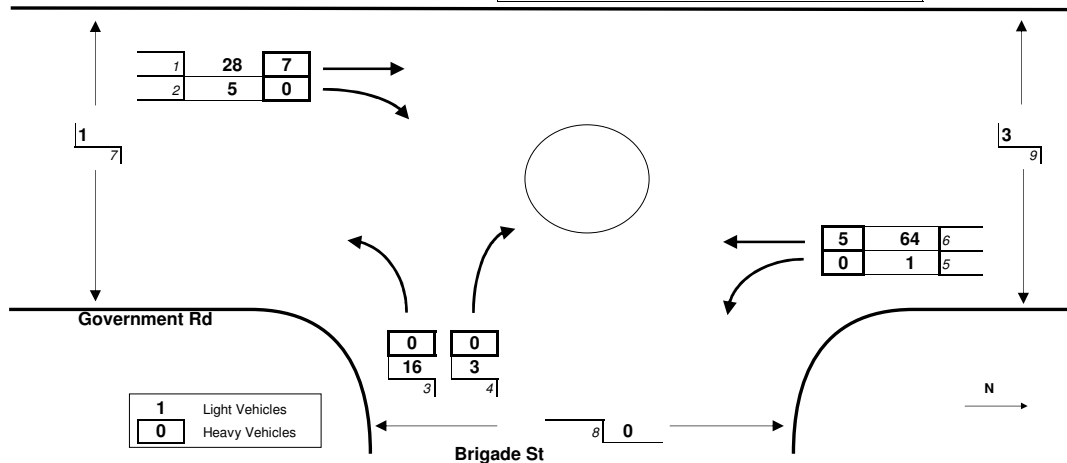
9:00 <<< HOUR ENDING

Thursday

Summary:

Government Rd / Brigade St

117 Total Light Vehicles
12 Total Heavy Vehicles
4 Total Pedestrians



4/6/2009 - Government Rd / Brigade St, Wyee

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6	15 MIN HOUR				7	8	9
07:15	0	0	0	0	0	1	1			0	0	0
07:30	6	0	0	0	0	9	15			0	0	0
07:45	2	0	1	2	0	14	19			0	0	0
08:00	4	0	5	2	0	12	23	58		0	0	0
08:15	4	0	8	3 <	0	16	31	88		0	0	1
08:30	7	2	6	0 <	1 <	19	35	108		0	0	1
08:45	9	1	2 <	0	0 <	19 <	31	120 <		0	0	0
09:00	8 <	2 <	0	0	0 <	10	20	117		1	0	1

Heavy Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	0	0		
07:30	0	0	0	0	0	1	1		
07:45	1	0	0	0	0	1	2		
08:00	1	0	0	0	0	0	1	4	
08:15	3	0	0	0	0	0	3	7	
08:30	1	0	0	0	0	4 <	5	11	
08:45	0	0	0	0	0	0	0	9	
09:00	3 <	0	0	0	0	1 <	4	12 <	

All Vehicles							Total Vehicles		
1	2	3	4	5	6	15 MIN HOUR			
07:15	0	0	0	0	0	1	1		
07:30	6	0	0	0	0	10	16		
07:45	3	0	1	2	0	15	21		
08:00	5	0	5	2	0	12	24	62	
08:15	7	0	8	3 <	0	16	34	95	
08:30	8	2	6	0 <	1 <	23	40	119	
08:45	9	1	2 <	0	0 <	19 <	31	129 <	
09:00	11 <	2 <	0	0	0 <	11	24	129 <	

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

3/6/2009 - Government Rd / Brigade St, Wyee

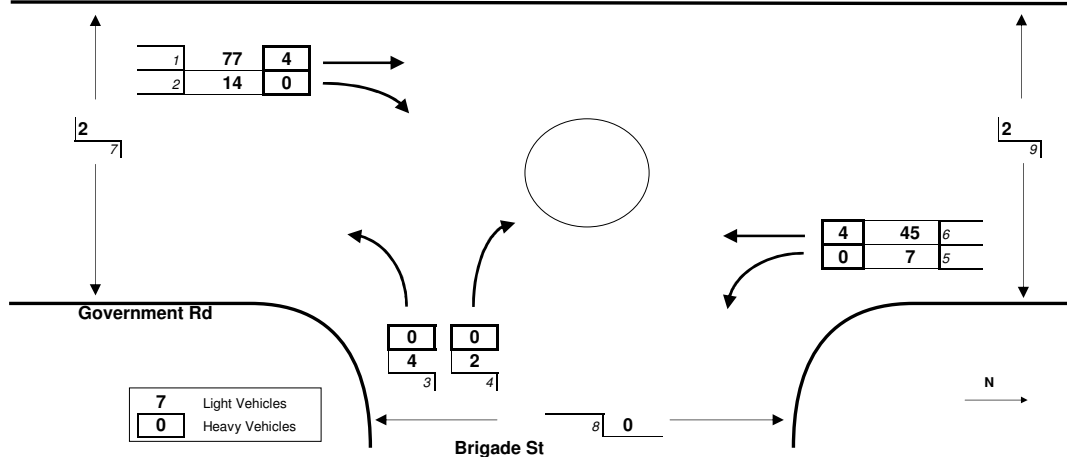
16:15 <<< HOUR ENDING

Wednesday

Summary:

Government Rd / Brigade St

149 Total Light Vehicles
8 Total Heavy Vehicles
4 Total Pedestrians



3/6/2009 - Government Rd / Brigade St, Wyee

Light Vehicles							Total Vehicles			Pedestrians		
1	2	3	4	5	6	15 MIN HOUR				7	8	9
15:15	11	0	0	1	1	8	21			0	0	0
15:30	25	0	0	0	6	9	40			0	0	1
15:45	15	5	2	0	0	11	33			0	0	0
16:00	17	3	2	0	1	14	37	131		0	0	1
16:15	20 <	6	0	2	0	11 <	39	149 <		2	0	0
16:30	11	7 <	3 <	1	0	5	27	136		0	0	0
16:45	17	3	2 <	0	1	8	31	134		0	0	1
17:00	18	5 <	1	1 <	2	6	33	130		0	0	0
17:15	13	4	0	1	1	11	30	121		1	0	0
17:30	20	2	1	0	1	7	31	125		0	0	1

Heavy Vehicles							Total Vehicles					
1	2	3	4	5	6	15 MIN HOUR						
15:15	4	0	0	0	1	0	5					
15:30	1	0	0	0	0	1	2					
15:45	2	0	0	0	0	3	5					
16:00	1 <	0	0	0	0 <	0 <	1	13 <				
16:15	0	0	0	0	0	0 <	0	8				
16:30	0	0	0	0	0	0	0	6				
16:45	2	0	0	0	0	1	3	4				
17:00	0	0	0	0	0	0	0	3				
17:15	0	0	0	0	0	0	0	3				
17:30	0	0	0	0	0	0	0	3				

All Vehicles							Total Vehicles					
1	2	3	4	5	6	15 MIN HOUR						
15:15	15	0	0	1	2	8	26					
15:30	26	0	0	0	6	10	42					
15:45	17	5	2	0	0	14	38					
16:00	18	3	2	0	1 <	14	38	144				
16:15	20 <	6	0	2	0	11 <	39	157 <				
16:30	11	7 <	3 <	1	0	5	27	142				
16:45	19	3	2 <	0	1	9	34	138				
17:00	18	5 <	1	1 <	2	6	33	133				
17:15	13	4	0	1	1	11	30	124				
17:30	20	2	1	0	1	7	31	128				

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

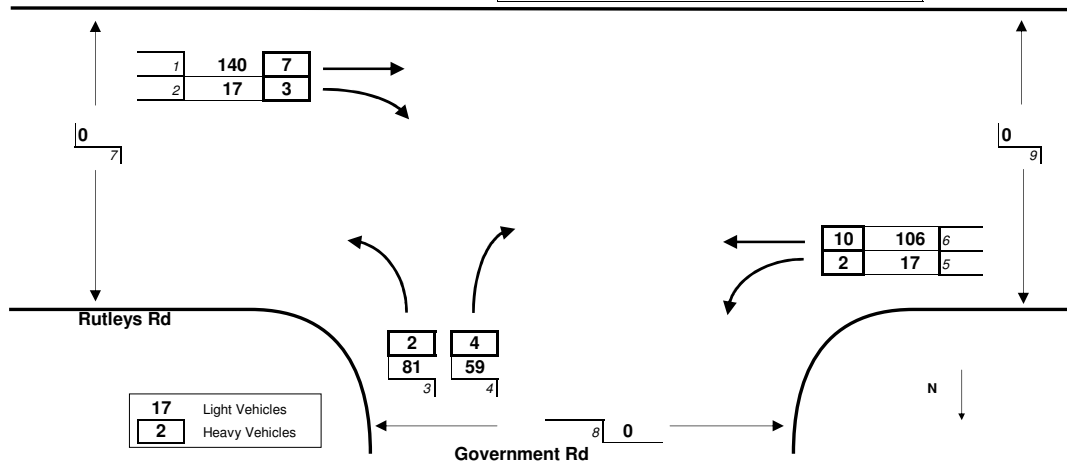
4/6/2009 - Rutleys Rd / Government Rd, Wyee

8:45 <<< HOUR ENDING

Thursday

Summary:

	Rutleys Rd	Government Rd
420	Total Light Vehicles	
28	Total Heavy Vehicles	
0	Total Pedestrians	



4/6/2009 - Rutleys Rd / Government Rd, Wyee

	Light Vehicles						Total Vehicles		Pedestrians		
	1	2	3	4	5	6	15 MIN HOUR		7	8	9
07:15	9	1	7	3	0	11	31		0	0	0
07:30	38	2	9	11	6	22	88		0	0	0
07:45	29	3	23	18	2	20	95		0	0	0
08:00	41	3	20	17	5	26	112	326	0	0	0
08:15	30	4	19	14	1	27	95	390	0	0	0
08:30	32	3	16	20 <	4	27	102	404	0	0	0
08:45	37 <	7	26 <	8	7 <	26 <	111	420 <	0	0	0
09:00	29	14 <	12	9	5 <	16	85	393	0	0	0

	Heavy Vehicles						Total Vehicles	
	1	2	3	4	5	6	15 MIN HOUR	
07:15	2	0	0	0	0	1	3	
07:30	3	2	2	0	1	2	10	
07:45	3	1	1	0	0	5	10	
08:00	5 <	1	0 <	0	0	1	7	30
08:15	0	2 <	0 <	1	0	2	5	32
08:30	1	0	2 <	3	2	5 <	13	35 <
08:45	1	0	0	0	0	2	3	28
09:00	1	1	0	1 <	2 <	2	7	28

	All Vehicles						Total Vehicles	
	1	2	3	4	5	6	15 MIN HOUR	
07:15	11	1	7	3	0	12	34	
07:30	41	4	11	11	7	24	98	
07:45	32	4	24	18	2	25	105	
08:00	46	4	20	17	5	27	119	356
08:15	30 <	6	19	15	1	29	100	422
08:30	33	3	18	23 <	6	32	115	439
08:45	38	7	26 <	8	7	28 <	114	448 <
09:00	30	15 <	12	10	7 <	18	92	421

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

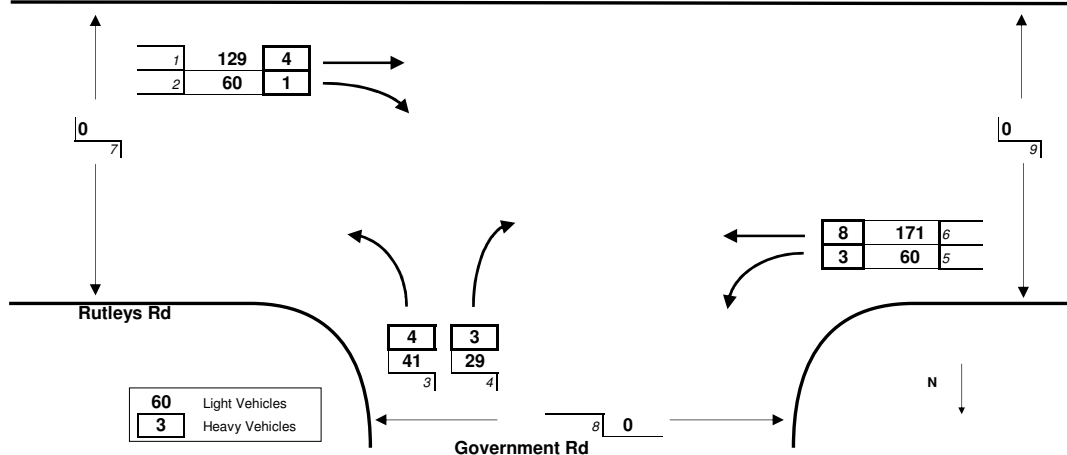
3/6/2009 - Rutleys Rd / Government Rd, Wyee

16:15 <<< HOUR ENDING

Wednesday

Summary:

	Rutleys Rd	Government Rd
490	Total Light Vehicles	
23	Total Heavy Vehicles	
0	Total Pedestrians	



3/6/2009 - Rutleys Rd / Government Rd, Wyee

	Light Vehicles					Total Vehicles		Pedestrians		
	1	2	3	4	5	6	15 MIN HOUR	7	8	9
15:15	29	15	9	5	4	31	93	0	0	0
15:30	28	16	7	7	15	44	117	0	0	0
15:45	39	12	8	10	18	32	119	0	0	0
16:00	39 <	13	18	5	12	44	131	460	0	0
16:15	23	19	8	7 <	15	51 <	123	490 <	0	0
16:30	23	13	9	2	14	43	104	477	0	0
16:45	26	19	9 <	6	15	31	106	464	0	0
17:00	21	16	9	5	18	45	114	447	0	0
17:15	21	16	10	3	13	47	110	434	0	0
17:30	20	20 <	10	4	20 <	34	108	438	0	0
	Heavy Vehicles					Total Vehicles				
	1	2	3	4	5	6	15 MIN HOUR			
15:15	2	3	2	0	0	2	9			
15:30	2	0	0	2	1	4	9			
15:45	1	1	2	1	1	3	9			
16:00	0	0 <	1 <	0 <	1 <	1	3	30 <		
16:15	1	0	1	0 <	0 <	0	2	23		
16:30	6	0	0	0	0	1	7	21		
16:45	1	1	1	0	2 <	2	7	19		
17:00	2 <	0	0	1	0	2	5	21		
17:15	0	0	0	0	0	3	3	22		
17:30	0	0	0	0	0	4 <	4	19		
	All Vehicles					Total Vehicles				
	1	2	3	4	5	6	15 MIN HOUR			
15:15	31	18	11	5	4	33	102			
15:30	30	16	7	9	16	48	126			
15:45	40	13	10	11	19	35	128			
16:00	39 <	13	19 <	5	13	45	134	490		
16:15	24	19	9	7 <	15	51 <	125	513 <		
16:30	29	13	9 <	2	14	44	111	498		
16:45	27	20	10 <	6	17	33	113	483		
17:00	23	16	9	6	18	47	119	468		
17:15	21	16	10	3	13	50	113	456		
17:30	20	20 <	10	4	20 <	38	112	457		

Note : Arrows "<" indicate the end time for the peak hour for each turning movement.

Appendix B

Automatic Counts

Bay St - west of Government Rd

High St - west of Government Rd

Government Rd - south of Brigade St

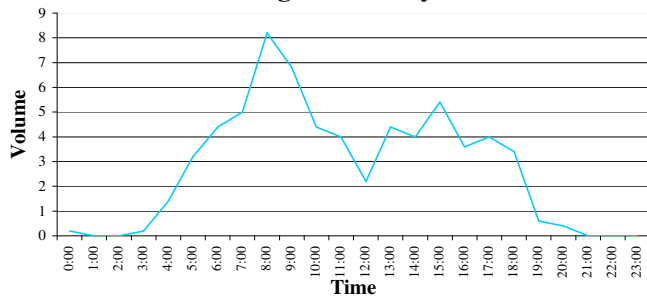
Government Rd - south of Rutleys Rd

Bay St West of Govenment Rd

Eastbound

Day Time	4/06/2009	Fri 5-Jun-09	Sat 6-Jun-09	Sun 7-Jun-09	Mon 8-Jun-09	Tue 9-Jun-09	Wed 10-Jun-09	W/Day Ave.	W/End Ave.	7 Day Ave
0:00	0	0	1	0	1	0	0	0	1	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	1	0	0	0	0	0	0	0	0
4:00	2	0	1	1	0	3	2	1	1	1
5:00	4	3	0	0	1	5	3	3	0	2
6:00	5	4	2	1	0	6	7	4	2	4
7:00	4	8	0	0	3	4	6	5	0	4
8:00	10	9	5	3	2	11	9	8	4	7
9:00	5	7	3	8	6	9	7	7	6	6
10:00	4	3	3	1	5	5	5	4	2	4
11:00	7	2	3	4	8	2	1	4	4	4
12:00	3	4	4	7	3	1	0	2	6	3
13:00	4	4	5	7	5	9	0	4	6	5
14:00	4	3	5	3	7	6	0	4	4	4
15:00	7	8	6	1	8	4	0	5	4	5
16:00	7	2	2	2	4	5	0	4	2	3
17:00	4	6	2	1	5	5	0	4	2	3
18:00	6	4	2	2	2	5	0	3	2	3
19:00	0	0	1	1	0	3	0	1	1	1
20:00	1	0	1	1	0	1	0	0	1	1
21:00	0	0	1	0	0	0	0	0	1	0
22:00	0	0	0	0	0	0	0	0	0	0
23:00	0	0	1	0	0	0	0	0	1	0
Total	77	68	48	43	60	84	40	66	46	60

Average Week Day



Summary

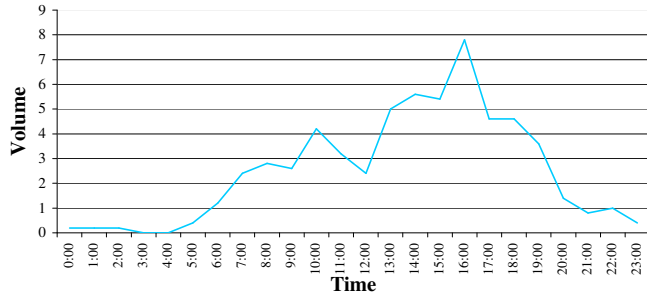
	from	to	
AM Peak	8:00 AM	9:00 AM	11
PM Peak	1:00 PM	2:00 PM	9
Week Day Average			66
Weekend Day Average			46
7 Day Average			60

Bay St West of Govenment Rd

Westbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	0	0	1	1	1	0	0	0	1	0
1:00	0	1	0	0	0	0	0	0	0	0
2:00	0	1	1	0	0	0	0	0	1	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	2	0	0	0
6:00	1	3	0	1	1	1	0	1	1	1
7:00	4	3	2	0	0	4	1	2	1	2
8:00	6	4	0	2	1	2	1	3	1	2
9:00	1	5	3	1	3	1	3	3	2	2
10:00	4	4	2	4	4	5	4	4	3	4
11:00	6	5	2	6	2	2	1	3	4	3
12:00	0	4	7	5	3	5	0	2	6	3
13:00	4	6	6	5	8	7	0	5	6	5
14:00	5	8	8	8	7	8	0	6	8	6
15:00	11	1	5	4	5	10	0	5	5	5
16:00	10	12	4	2	8	9	0	8	3	6
17:00	5	4	5	7	7	7	0	5	6	5
18:00	5	9	4	5	3	6	0	5	5	5
19:00	7	3	4	0	2	6	0	4	2	3
20:00	2	2	1	1	1	2	0	1	1	1
21:00	1	0	2	1	1	2	0	1	2	1
22:00	3	0	0	0	0	2	0	1	0	1
23:00	0	2	0	0	0	0	0	0	0	0
Total	75	77	57	53	57	79	12	60	55	59

Average Week Day



Summary

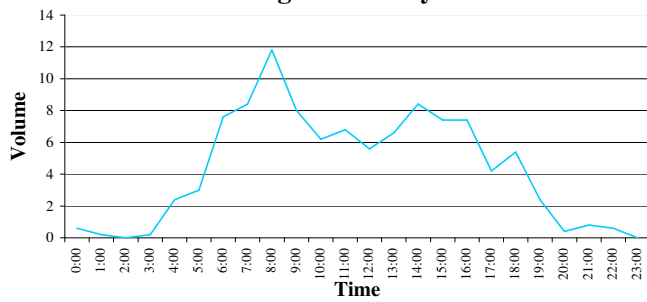
	from	to	
AM Peak	8:00 AM	9:00 AM	6
PM Peak	4:00 PM	5:00 PM	12
Week Day Average			60
Weekend Day Average			55
7 Day Average			59

High St West of Government Rd

Eastbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	0	0	0	1	3	0	0	1	1	1
1:00	0	0	1	0	1	0	0	0	1	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	1	0	0	0	0	0
4:00	3	2	2	0	0	5	2	2	1	2
5:00	4	2	2	0	0	2	7	3	1	2
6:00	13	8	3	3	3	6	8	8	3	6
7:00	11	11	9	4	2	11	7	8	7	8
8:00	13	15	6	3	4	16	11	12	5	10
9:00	7	6	11	12	10	8	9	8	12	9
10:00	4	7	11	12	8	4	8	6	12	8
11:00	7	6	14	5	13	8	0	7	10	8
12:00	8	8	7	12	5	7	0	6	10	7
13:00	5	5	9	10	14	9	0	7	10	7
14:00	11	9	6	8	8	14	0	8	7	8
15:00	12	7	7	4	6	12	0	7	6	7
16:00	5	13	5	5	6	13	0	7	5	7
17:00	6	5	6	8	5	5	0	4	7	5
18:00	6	10	4	5	5	6	0	5	5	5
19:00	2	5	3	4	2	3	0	2	4	3
20:00	0	0	1	2	0	2	0	0	2	1
21:00	1	1	1	3	1	1	0	1	2	1
22:00	2	0	3	0	1	0	0	1	2	1
23:00	0	0	1	0	0	0	0	0	1	0
Total	120	120	112	101	98	132	52	104	107	105

Average Week Day



Summary

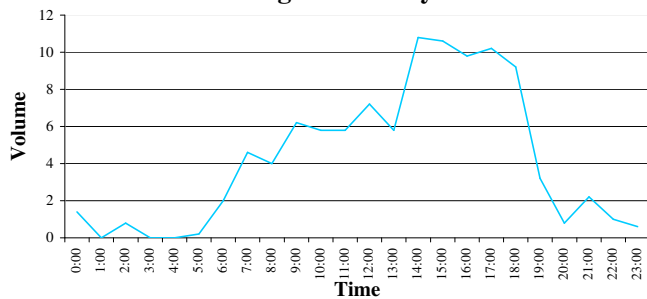
	from	to	
AM Peak	8:00 AM	9:00 AM	16
PM Peak	1:00 PM	2:00 PM	14
Week Day Average			104
Weekend Day Average			107
7 Day Average			105

High St West of Government Rd

Westbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	1	1	0	1	4	0	1	1	1	1
1:00	0	0	2	2	0	0	0	0	2	1
2:00	1	2	2	0	0	0	1	1	1	1
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	1	0	0	0	0	1	0
5:00	0	0	3	0	0	0	1	0	2	1
6:00	3	2	2	1	1	2	2	2	2	2
7:00	4	5	2	2	0	8	6	5	2	4
8:00	5	7	3	2	1	3	4	4	3	4
9:00	7	5	5	4	6	10	3	6	5	6
10:00	5	7	11	11	5	4	8	6	11	7
11:00	9	5	11	5	9	6	0	6	8	6
12:00	9	7	10	10	10	10	0	7	10	8
13:00	4	6	13	8	10	9	0	6	11	7
14:00	9	16	7	10	11	18	0	11	9	10
15:00	15	10	7	14	13	15	0	11	11	11
16:00	13	13	11	7	5	18	0	10	9	10
17:00	14	18	4	7	8	11	0	10	6	9
18:00	11	17	8	7	10	8	0	9	8	9
19:00	4	2	6	5	3	7	0	3	6	4
20:00	2	1	1	4	0	1	0	1	3	1
21:00	4	1	1	4	2	4	0	2	3	2
22:00	1	2	4	1	1	1	0	1	3	1
23:00	2	1	1	0	0	0	0	1	1	1
Total	123	128	114	106	99	135	26	102	110	104

Average Week Day



Summary

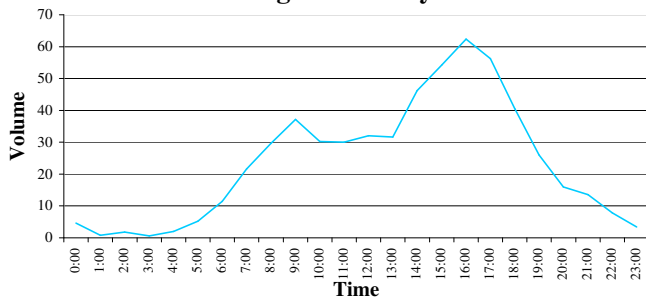
	from	to	
AM Peak	9:00 AM	10:00 AM	10
PM Peak	2:00 PM	3:00 PM	18
Week Day Average			102
Weekend Day Average			110
7 Day Average			104

Govenment Rd South of Brigade St

Northbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	6	7	8	9	7	1	2	5	9	6
1:00	1	1	9	9	1	0	1	1	9	3
2:00	1	3	7	2	1	2	2	2	5	3
3:00	1	0	2	0	0	0	2	1	1	1
4:00	0	0	3	1	2	4	4	2	2	2
5:00	3	1	6	1	2	10	10	5	4	5
6:00	8	9	9	2	5	19	16	11	6	10
7:00	20	21	18	10	5	29	33	22	14	19
8:00	39	26	15	18	14	37	32	30	17	26
9:00	26	34	27	36	46	46	34	37	32	36
10:00	31	29	51	43	43	31	17	30	47	35
11:00	36	32	66	43	49	33	0	30	55	37
12:00	29	43	68	60	51	37	0	32	64	41
13:00	27	43	67	66	48	40	0	32	67	42
14:00	52	55	59	49	68	56	0	46	54	48
15:00	70	68	53	52	63	70	0	54	53	54
16:00	84	86	68	60	53	89	0	62	64	63
17:00	80	76	52	50	50	75	0	56	51	55
18:00	51	58	35	39	39	55	0	41	37	40
19:00	33	34	26	14	22	41	0	26	20	24
20:00	33	16	14	18	12	19	0	16	16	16
21:00	18	23	22	11	12	15	0	14	17	14
22:00	11	16	15	12	2	10	0	8	14	9
23:00	6	9	8	5	1	1	0	3	7	4
Total	666	690	708	610	596	720	153	565	659	592

Average Week Day



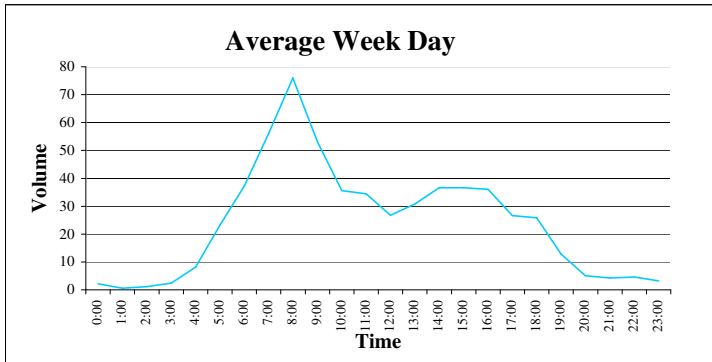
Summary

	from	to	
AM Peak	11:00 AM	12:00 PM	49
PM Peak	4:00 PM	5:00 PM	89
Week Day Average			565
Weekend Day Average			659
7 Day Average			592

Government Rd South of Brigade St

Southbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	2	3	6	6	5	1	0	2	6	3
1:00	1	0	2	2	1	0	1	1	2	1
2:00	0	1	1	2	2	3	0	1	2	1
3:00	4	3	3	0	1	1	3	2	2	2
4:00	10	6	8	1	1	15	9	8	5	7
5:00	27	28	14	3	6	29	26	23	9	19
6:00	49	34	13	7	11	41	51	37	10	29
7:00	62	73	25	16	14	65	66	56	21	46
8:00	86	88	40	28	31	94	81	76	34	64
9:00	59	43	61	64	60	48	55	53	63	56
10:00	41	45	61	43	46	30	16	36	52	40
11:00	43	33	53	50	53	43	0	34	52	39
12:00	20	32	44	53	49	33	0	27	49	33
13:00	27	34	51	52	51	42	0	31	52	37
14:00	48	47	49	45	52	36	0	37	47	40
15:00	48	41	59	32	52	42	0	37	46	39
16:00	49	48	35	38	35	48	0	36	37	36
17:00	44	36	28	28	25	28	0	27	28	27
18:00	37	36	16	20	26	30	0	26	18	24
19:00	14	20	18	13	11	19	0	13	16	14
20:00	7	6	10	13	6	6	0	5	12	7
21:00	5	6	16	9	6	4	0	4	13	7
22:00	6	7	8	2	6	4	0	5	5	5
23:00	1	14	10	3	0	1	0	3	7	4
Total	690	684	631	530	550	663	308	579	581	579



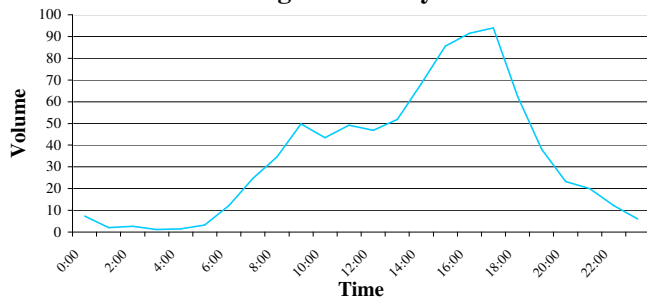
Summary			
	from	to	
AM Peak	8:00 AM	9:00 AM	94
PM Peak	2:00 PM	3:00 PM	52
Week Day Average			579
Weekend Day Average			580
7 Day Average			579

Government Rd 80m North of Rutleys Rd

Northbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	12	14	13	11	7	2	2	7	12	9
1:00	2	3	10	10	2	1	2	2	10	4
2:00	1	4	7	2	4	2	2	3	5	3
3:00	1	0	1	2	2	1	2	1	2	1
4:00	2	0	3	1	2	1	2	1	2	2
5:00	5	5	5	2	0	3	3	3	4	3
6:00	16	11	10	3	8	17	9	12	7	11
7:00	29	31	17	15	6	32	26	25	16	22
8:00	54	38	26	17	13	38	30	35	22	31
9:00	41	59	40	37	49	54	46	50	39	47
10:00	53	47	72	57	52	43	22	43	65	49
11:00	58	54	92	60	78	56	0	49	76	57
12:00	49	66	93	83	59	60	0	47	88	59
13:00	53	71	94	68	77	58	0	52	81	60
14:00	82	94	75	67	86	80	0	68	71	69
15:00	116	117	69	77	86	109	0	86	73	82
16:00	123	127	90	81	75	132	0	91	86	90
17:00	136	133	78	72	73	128	0	94	75	89
18:00	95	87	49	47	48	82	0	62	48	58
19:00	48	57	31	30	25	61	0	38	31	36
20:00	42	24	17	25	18	32	0	23	21	23
21:00	32	31	33	16	14	23	0	20	25	21
22:00	17	25	20	18	3	16	0	12	19	14
23:00	11	10	10	8	5	4	0	6	9	7
Total	1078	1108	955	809	792	1035	146	832	882	846

Average Week Day



Summary

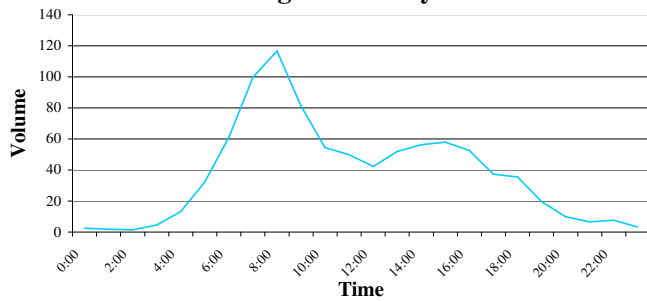
	from	to	
AM Peak	11:00 AM	12:00 PM	78
PM Peak	5:00 PM	6:00 PM	136
Week Day Average			832
Weekend Day Average			882
7 Day Average			846

Government Rd 80m North of Rutleys Rd

Southbound

Day Time	4/06/2009	Fri	Sat	Sun	Mon	Tue	Wed	W/Day Ave.	W/End Ave.	7 Day Ave
	4/06/2009	5-Jun-09	6-Jun-09	7-Jun-09	8-Jun-09	9-Jun-09	10-Jun-09			
0:00	3	4	7	7	3	2	0	2	7	4
1:00	1	0	3	3	5	1	2	2	3	2
2:00	0	1	3	2	3	3	0	1	3	2
3:00	7	4	4	2	2	5	5	5	3	4
4:00	15	12	10	2	3	22	14	13	6	11
5:00	38	36	16	6	10	36	41	32	11	26
6:00	77	58	25	14	15	71	85	61	20	49
7:00	117	125	39	24	23	124	110	100	32	80
8:00	130	142	63	38	43	140	129	117	51	98
9:00	95	71	94	93	82	80	78	81	94	85
10:00	61	65	110	67	77	46	23	54	89	64
11:00	62	45	80	70	78	65	0	50	75	57
12:00	41	58	68	90	64	48	0	42	79	53
13:00	55	66	71	68	75	64	0	52	70	57
14:00	73	71	67	61	77	60	0	56	64	58
15:00	74	76	75	44	75	65	0	58	60	58
16:00	73	70	65	55	53	67	0	53	60	55
17:00	55	53	50	39	37	42	0	37	45	39
18:00	50	52	25	28	33	42	0	35	27	33
19:00	24	27	22	19	15	32	0	20	21	20
20:00	14	16	13	22	10	10	0	10	18	12
21:00	9	10	18	12	8	6	0	7	15	9
22:00	9	15	15	9	9	5	0	8	12	9
23:00	2	14	11	4	0	1	0	3	8	5
Total	1085	1091	954	779	800	1037	487	900	867	890

Average Week Day



Summary

	from	to	
AM Peak	8:00 AM	9:00 AM	142
PM Peak	2:00 PM	3:00 PM	77
Week Day Average			900
Weekend Day Average			867
7 Day Average			890

Appendix C

SIDRA Analysis

– 150 Lot Development

Bay St / Government Rd

High St / Government Rd

Government Rd / Brigade St

Government Rd / Rutleys Rd

SIDRA Analysis - Worst Turning Movement (150 Lot Development)

Intersection	Peak	Movement Performance - Vehicles										Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Mov ID	Turn	Demand		Deg.	Average	Level of	95% Back of Queue	Distance m				
				Flow veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh					
Rutleys Rd / Government Rd														
	AM	6	R	111	2	0.349	14.1	LOS B	1.3	9.2	0.56	0.85	43.1	
	PM	6	R	44	2	0.164	15.5	LOS C	0.5	3.8	0.61	0.86	41.8	
Brigade St / Government Rd														
	AM	3	R	8	1	0.028	11.9	LOS B	0.2	1.3	0.36	0.69	45.5	
	PM	3	R	14	1	0.018	11.2	LOS B	0.1	0.8	0.23	0.66	45.7	
High Street / Government Rd														
	AM	6	R	2	1	0.063	15.9	LOS C	0.5	3.3	0.2	1.48	43.4	
	PM	6	R	2	1	0.029	16	LOS C	0.2	1.6	0.31	1.34	43.6	
Bay Street / Government Rd														
	AM	6	R	1	1	0.009	15.2	LOS C	0.1	0.4	0.11	1.51	43.5	
	PM	6	R	2	1	0.007	14.3	LOS B	0	0.3	0.17	1.26	44.3	

MOVEMENT SUMMARY

Site: Rutleys Rd / Government Rd - 2019 AM

MOVEMENT SUMMARY

Rutleys Rd / Government Rd AM 2019**Giveway / Yield (Two-Way)****Movement Performance - Vehicles**

<i>Mov ID</i>	<i>Turn</i>	<i>Demand Flow veh/h</i>	<i>HV %</i>	<i>Deg. Satn v/c</i>	<i>Average Delay sec</i>	<i>Level of Service</i>	<i>95% Back of Queue</i>		<i>Prop. Queued</i>	<i>Effective Stop Rate per veh</i>	<i>Average Speed km/h</i>
							<i>Vehicles veh</i>	<i>Distance m</i>			
Rutleys Rd (east)											
2	T	170	2	0.088	0	LOS A	0	0	0	0	60
3	R	57	2	0.047	8.8	LOS A	0.2	1.7	0.28	0.61	47.6
Approach		227	2	0.088	2.2	LOS A	0.2	1.7	0.07	0.15	56.1
Government Rd											
4	L	136	2	0.133	8.9	LOS A	0.6	4.6	0.28	0.62	47.7
6	R	111	2	0.349	14.1	LOS B	1.3	9.2	0.56	0.85	43.1
Approach		247	2	0.349	11.2	LOS B	1.3	9.2	0.41	0.73	45.5
Rutleys Rd (west)											
7	L	44	2	0.024	8	LOS A	0	0	0	0.63	49
8	T	139	2	0.072	0	LOS A	0	0	0	0	60
Approach		183	2	0.072	1.9	LOS A	0	0	0	0.15	56.7
All Vehicles		657	2	0.349	5.5	NA	1.3	9.2	0.18	0.37	51.6

Rutleys Rd / Government Rd PM 2019**Giveway / Yield (Two-Way)****Movement Performance - Vehicles**

<i>Mov ID</i>	<i>Turn</i>	<i>Demand Flow veh/h</i>	<i>HV %</i>	<i>Deg. Satn v/c</i>	<i>Average Delay sec</i>	<i>Level of Service</i>	<i>95% Back of Queue</i>		<i>Prop. Queued</i>	<i>Effective Stop Rate per veh</i>	<i>Average Speed km/h</i>
							<i>Vehicles veh</i>	<i>Distance m</i>			
Rutleys Rd (east)											
2	T	134	2	0.07	0	LOS A	0	0	0	0	60
3	R	127	2	0.124	9.7	LOS A	0.6	4.5	0.42	0.69	47.1
Approach		261	2	0.124	4.7	LOS A	0.6	4.5	0.21	0.33	52.7
Government Rd											
4	L	64	2	0.072	9.5	LOS A	0.3	2.3	0.37	0.66	47.3
6	R	44	2	0.164	15.5	LOS C	0.5	3.8	0.61	0.86	41.8
Approach		108	2	0.164	12	LOS C	0.5	3.8	0.47	0.74	44.9
Rutleys Rd (west)											
7	L	121	2	0.066	8	LOS A	0	0	0	0.63	49
8	T	228	2	0.118	0	LOS A	0	0	0	0	60
Approach		349	2	0.118	2.8	LOS A	0	0	0	0.22	55.4
All Vehicles		718	2	0.164	4.9	NA	0.6	4.5	0.15	0.34	52.5

MOVEMENT SUMMARY

Site: Brigade St / Government Rd - 2019 AM

MOVEMENT SUMMARY

Brigade St / Government Rd - AM Peak 2019**Roundabout**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Brigade St											
1	L	22	1	0.028	8.1	LOS A	0.2	1.3	0.36	0.55	48.2
3	R	8	1	0.028	11.9	LOS B	0.2	1.3	0.36	0.69	45.5
Approach		31	1	0.028	9.1	LOS B	0.2	1.3	0.36	0.59	47.4
Government Rd (north)											
4	L	11	1	0.118	7.8	LOS A	0.8	6	0.06	0.64	49.1
5	T	175	2	0.118	6.5	LOS A	0.8	6	0.06	0.51	50.5
Approach		185	1.9	0.118	6.6	LOS A	0.8	6	0.06	0.51	50.4
Government Rd (south)											
11	T	82	2	0.06	6.5	LOS A	0.4	2.7	0.06	0.5	50.4
12	R	7	1	0.06	10.9	LOS B	0.4	2.7	0.06	0.85	46.4
Approach		89	1.9	0.06	6.8	LOS B	0.4	2.7	0.06	0.53	50.1
All Vehicles		305	1.8	0.118	6.9	LOS A	0.8	6	0.09	0.53	50

Brigade St / Government Rd - PM Peak 2019**Roundabout**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Brigade St											
1	L	8	1	0.018	7.3	LOS A	0.1	0.8	0.23	0.53	49
3	R	14	1	0.018	11.2	LOS B	0.1	0.8	0.23	0.66	45.7
Approach		22	1	0.018	9.8	LOS B	0.1	0.8	0.23	0.61	46.8
Government Rd (north)											
4	L	8	1	0.06	8	LOS A	0.4	2.9	0.13	0.63	48.9
5	T	73	2	0.06	6.6	LOS A	0.4	2.9	0.13	0.49	50
Approach		81	1.9	0.06	6.7	LOS A	0.4	2.9	0.13	0.51	49.9
Government Rd (south)											
11	T	165	2	0.127	6.5	LOS A	0.8	5.9	0.08	0.49	50.3
12	R	27	1	0.127	10.8	LOS B	0.8	5.9	0.08	0.81	46.3
Approach		192	1.9	0.127	7.1	LOS B	0.8	5.9	0.08	0.54	49.7
All Vehicles		295	1.8	0.127	7.2	LOS A	0.8	5.9	0.11	0.54	49.5

MOVEMENT SUMMARY

Site: High St / Government Rd - 2019 AM

MOVEMENT SUMMARY

High Street / Government Rd - AM Peak 2019**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>	<i>HV</i>	<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>%</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>		<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Government Rd (north)											
5	T	119	1	0.063	0.3	LOS A	0.5	3.3	0.2	0	55.7
6	R	2	1	0.063	15.9	LOS C	0.5	3.3	0.2	1.48	43.4
Approach		121	1	0.063	0.6	LOS C	0.5	3.3	0.2	0.02	55.4
High St (west)											
7	L	4	1	0.089	10	LOS B	0.4	3.1	0.34	0.56	46.9
9	R	58	1	0.089	10.2	LOS B	0.4	3.1	0.34	0.68	46.7
Approach		62	1	0.089	10.2	LOS B	0.4	3.1	0.34	0.67	46.7
Government Rd (south)											
10	L	25	1	0.042	11	LOS B	0	0	0	1.06	46.3
11	T	56	1	0.042	0	LOS A	0	0	0	0	60
Approach		81	1	0.042	3.4	LOS B	0	0	0	0.33	54.5
All Vehicles		264	1	0.089	3.7	NA	0.5	3.3	0.17	0.27	52.7

High Street / Government Rd - PM Peak 2019**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>	<i>HV</i>	<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>%</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>		<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Government Rd (north)											
5	T	53	1	0.029	0.7	LOS A	0.2	1.6	0.31	0	53.6
6	R	2	1	0.029	16	LOS C	0.2	1.6	0.31	1.34	43.6
Approach		55	1	0.029	1.2	LOS C	0.2	1.6	0.31	0.05	53.1
High St (west)											
7	L	4	1	0.044	10	LOS A	0.2	1.5	0.36	0.6	46.9
9	R	27	1	0.044	10.2	LOS B	0.2	1.5	0.36	0.67	46.7
Approach		31	1	0.044	10.1	LOS B	0.2	1.5	0.36	0.66	46.8
Government Rd (south)											
10	L	58	1	0.093	10.9	LOS B	0	0	0	1.04	46.4
11	T	119	1	0.093	0	LOS A	0	0	0	0	60
Approach		177	1	0.093	3.6	LOS B	0	0	0	0.34	54.3
All Vehicles		263	1	0.093	3.9	NA	0.2	1.6	0.11	0.32	53

MOVEMENT SUMMARY

Site: Bay St / Government Rd - 2019 AM

MOVEMENT SUMMARY

Bay Street / Government Rd - AM Peak 2019**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Government Rd (north)											
5	T	16	1	0.009	0.1	LOS A	0.1	0.4	0.11	0	57.6
6	R	1	1	0.009	15.2	LOS C	0.1	0.4	0.11	1.51	43.5
Approach		17	1	0.009	1	LOS C	0.1	0.4	0.11	0.09	56.3
Bay St (west)											
7	L	2	1	0.061	8.5	LOS A	0.3	2.1	0.14	0.58	48.2
9	R	50	1	0.06	8.7	LOS A	0.3	2.1	0.14	0.64	48.1
Approach		52	1	0.06	8.7	LOS A	0.3	2.1	0.14	0.63	48.1
Government Rd (south)											
10	L	23	1	0.017	8.7	LOS A	0	0	0	0.75	48.4
11	T	8	1	0.017	0	LOS A	0	0	0	0	60
Approach		31	1	0.017	6.4	LOS A	0	0	0	0.55	50.6
All Vehicles		100	1	0.061	6.7	NA	0.3	2.1	0.09	0.52	50

Bay Street / Government Rd - AM Peak 2019**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
Government Rd (north)											
5	T	10	1	0.007	0.2	LOS A	0	0.3	0.17	0	56
6	R	2	1	0.007	14.3	LOS B	0	0.3	0.17	1.26	44.3
Approach		12	1	0.007	2.6	LOS B	0	0.3	0.17	0.21	53.4
Bay St (west)											
7	L	1	1	0.032	8.6	LOS A	0.2	1.1	0.17	0.58	48.1
9	R	26	1	0.032	8.8	LOS A	0.2	1.1	0.17	0.63	47.9
Approach		27	1	0.032	8.8	LOS A	0.2	1.1	0.17	0.63	47.9
Government Rd (south)											
10	L	57	1	0.038	8.4	LOS A	0	0	0	0.72	48.6
11	T	14	1	0.038	0	LOS A	0	0	0	0	60
Approach		71	1	0.038	6.8	LOS A	0	0	0	0.58	50.3
All Vehicles		110	1	0.038	6.8	NA	0.2	1.1	0.06	0.55	50

Appendix D

SIDRA Analysis

– 250 Lot Development

Bay St / Government Rd

High St / Government Rd

Government Rd / Brigade St

Government Rd / Rutleys Rd

SIDRA Analysis - Worst Turning Movement (250 Lot Development)

Intersection	Peak	Movement Performance - Vehicles										Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Mov ID	Turn	Demand		Deg.	Average	Level of	95% Back of Queue	Distance m				
				Flow veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh					
Rutleys Rd / Government Rd														
	AM	6	R	136	2	0.435	15.5	LOS C	1.8	13	0.59	0.91	41.9	
	PM	6	R	55	2	0.213	16.7	LOS C	0.7	5.1	0.64	0.88	40.9	
Brigade St / Government Rd														
	AM	3	R	11	1	0.031	12.1	LOS B	0.2	1.5	0.41	0.68	45.4	
	PM	3	R	19	1	0.023	11.3	LOS B	0.2	1.1	0.27	0.65	45.6	
High Street / Government Rd														
	AM	6	R	3	1	0.079	15.9	LOS C	0.6	4.2	0.24	1.44	43.5	
	PM	6	R	4	1	0.037	16.1	LOS C	0.3	2.1	0.36	1.27	43.7	
Bay Street / Government Rd														
	AM	6	R	2	1	0.01	14.7	LOS B	0.1	0.4	0.13	1.39	43.9	
	PM	6	R	4	1	0.008	13.2	LOS B	0.1	0.4	0.2	1.08	45.1	

MOVEMENT SUMMARY

Site: Rutleys Rd / Government Rd - 2019 AM

MOVEMENT SUMMARY

Rutleys Rd / Government Rd AM 2019 250 Lots

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand Flow veh/h</i>	<i>HV %</i>	<i>Deg. Satn v/c</i>	<i>Average Delay sec</i>	<i>Level of Service</i>	<i>95% Back of Queue</i>		<i>Prop. Queued</i>	<i>Effective Stop Rate per veh</i>	<i>Average Speed km/h</i>
							<i>Vehicles veh</i>	<i>Distance m</i>			
South Rutleys Rd (east)											
2	T	170	2	0.088	0	LOS A	0	0	0	0	60
3	R	68	2	0.057	8.9	LOS A	0.3	2	0.3	0.62	47.6
Approach		238	2	0.088	2.5	LOS A	0.3	2	0.08	0.18	55.6
East Government Rd											
4	L	161	2	0.159	8.9	LOS A	0.8	5.6	0.3	0.63	47.7
6	R	136	2	0.435	15.5	LOS C	1.8	13	0.59	0.91	41.9
Approach		297	2	0.434	11.9	LOS C	1.8	13	0.43	0.76	44.8
North Rutleys Rd (west)											
7	L	55	2	0.03	8	LOS A	0	0	0	0.63	49
8	T	139	2	0.072	0	LOS A	0	0	0	0	60
Approach		194	2	0.072	2.3	LOS A	0	0	0	0.18	56.2
All Vehicles		729	2	0.435	6.3	NA	1.8	13	0.2	0.41	50.6

Rutleys Rd / Government Rd PM 2019 250 Lots

Giveway / Yield (Two-Way)

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand Flow veh/h</i>	<i>HV %</i>	<i>Deg. Satn v/c</i>	<i>Average Delay sec</i>	<i>Level of Service</i>	<i>95% Back of Queue</i>		<i>Prop. Queued</i>	<i>Effective Stop Rate per veh</i>	<i>Average Speed km/h</i>
							<i>Vehicles veh</i>	<i>Distance m</i>			
South Rutleys Rd (east)											
2	T	134	2	0.07	0	LOS A	0	0	0	0	60
3	R	152	2	0.153	9.9	LOS A	0.8	5.7	0.45	0.71	46.9
Approach		286	2	0.153	5.3	LOS A	0.8	5.7	0.24	0.38	52
East Government Rd											
4	L	75	2	0.086	9.6	LOS A	0.4	2.8	0.39	0.67	47.2
6	R	55	2	0.213	16.7	LOS C	0.7	5.1	0.64	0.88	40.9
Approach		130	2	0.213	12.6	LOS C	0.7	5.1	0.49	0.76	44.4
North Rutleys Rd (west)											
7	L	147	2	0.08	8	LOS A	0	0	0	0.63	49
8	T	228	2	0.118	0	LOS A	0	0	0	0	60
Approach		375	2	0.118	3.1	LOS A	0	0	0	0.25	54.9
All Vehicles		791	2	0.213	5.5	NA	0.8	5.7	0.17	0.38	51.8

MOVEMENT SUMMARY

Site: Brigade St / Government Rd - 2019 AM

MOVEMENT SUMMARY

Brigade St / Government Rd - AM Peak 2019 250 Lots**Roundabout**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
South Brigade St											
1	L	22	1	0.031	8.4	LOS A	0.2	1.5	0.41	0.57	47.9
3	R	11	1	0.031	12.1	LOS B	0.2	1.5	0.41	0.68	45.4
Approach		33	1	0.031	9.6	LOS B	0.2	1.5	0.41	0.6	47.1
East Government Rd (north)											
4	L	16	1	0.153	7.8	LOS A	1.1	8.1	0.06	0.64	49.1
5	T	228	2	0.153	6.5	LOS A	1.1	8.1	0.06	0.51	50.4
Approach		244	1.9	0.153	6.6	LOS A	1.1	8.1	0.06	0.51	50.4
West Government Rd (south)											
11	T	105	2	0.075	6.5	LOS A	0.5	3.6	0.07	0.5	50.4
12	R	7	1	0.075	10.9	LOS B	0.5	3.6	0.07	0.85	46.4
Approach		113	1.9	0.075	6.8	LOS B	0.5	3.6	0.07	0.52	50.1
All Vehicles		389	1.9	0.153	6.9	LOS A	1.1	8.1	0.09	0.52	50

Brigade St / Government Rd - PM Peak 2019 250 Lots**Roundabout**

Movement Performance - Vehicles

<i>Mov ID</i>	<i>Turn</i>	<i>Demand</i>		<i>Deg.</i>	<i>Average</i>	<i>Level of</i>	<i>95% Back of Queue</i>		<i>Prop.</i>	<i>Effective</i>	<i>Average</i>
		<i>Flow</i>	<i>HV</i>	<i>Satn</i>	<i>Delay</i>	<i>Service</i>	<i>Vehicles</i>	<i>Distance</i>	<i>Queued</i>	<i>Stop Rate</i>	<i>Speed</i>
		<i>veh/h</i>	<i>%</i>	<i>v/c</i>	<i>sec</i>		<i>veh</i>	<i>m</i>		<i>per veh</i>	<i>km/h</i>
South Brigade St											
1	L	8	1	0.023	7.4	LOS A	0.2	1.1	0.27	0.53	48.8
3	R	19	1	0.023	11.3	LOS B	0.2	1.1	0.27	0.65	45.6
Approach		27	1	0.023	10.2	LOS B	0.2	1.1	0.27	0.62	46.5
East Government Rd (north)											
4	L	10	1	0.076	7.9	LOS A	0.5	3.8	0.13	0.61	48.9
5	T	95	2	0.076	6.6	LOS A	0.5	3.8	0.13	0.49	50
Approach		105	1.9	0.076	6.7	LOS A	0.5	3.8	0.13	0.5	49.9
West Government Rd (south)											
11	T	216	2	0.162	6.5	LOS A	1.1	7.9	0.1	0.49	50.2
12	R	27	1	0.162	10.8	LOS B	1.1	7.9	0.1	0.8	46.3
Approach		243	1.9	0.162	7	LOS B	1.1	7.9	0.1	0.53	49.7
All Vehicles		375	1.8	0.162	7.1	LOS A	1.1	7.9	0.12	0.53	49.5

MOVEMENT SUMMARY

Site: High St / Government Rd - 2019 AM

MOVEMENT SUMMARY

High Street / Government Rd - AM Peak 2019 250 Lots**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop.	Effective Stop Rate per veh	Average Speed km/h
							Vehicles veh	Distance m	Queued		
East Government Rd (north)											
5	T	147	1	0.078	0.4	LOS A	0.6	4.2	0.24	0	55
6	R	3	1	0.079	15.9	LOS C	0.6	4.2	0.24	1.44	43.5
Approach		150	1	0.078	0.7	LOS C	0.6	4.2	0.24	0.03	54.7
North High St (west)											
7	L	5	1	0.139	10.7	LOS B	0.7	5	0.41	0.57	46.2
9	R	86	1	0.141	10.9	LOS B	0.7	5	0.41	0.72	46
Approach		91	1	0.14	10.9	LOS B	0.7	5	0.41	0.71	46
West Government Rd (south)											
10	L	37	1	0.055	10.8	LOS B	0	0	0	1.02	46.5
11	T	68	1	0.055	0	LOS A	0	0	0	0	60
Approach		105	1	0.055	3.8	LOS B	0	0	0	0.36	53.9
All Vehicles		346	1	0.141	4.3	NA	0.7	5	0.21	0.31	51.8

High Street / Government Rd - PM Peak 2019 250 Lots**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop.	Effective Stop Rate per veh	Average Speed km/h
							Vehicles veh	Distance m	Queued		
East Government Rd (north)											
5	T	65	1	0.037	0.9	LOS A	0.3	2.1	0.36	0	52.6
6	R	4	1	0.037	16.1	LOS C	0.3	2.1	0.36	1.27	43.7
Approach		69	1	0.037	1.8	LOS C	0.3	2.1	0.36	0.07	51.9
North High St (west)											
7	L	4	1	0.068	10.7	LOS B	0.3	2.3	0.42	0.62	46.1
9	R	39	1	0.068	10.9	LOS B	0.3	2.3	0.42	0.71	46
Approach		43	1	0.068	10.9	LOS B	0.3	2.3	0.42	0.7	46
West Government Rd (south)											
10	L	86	1	0.123	10.7	LOS B	0	0	0	1	46.6
11	T	147	1	0.123	0	LOS A	0	0	0	0	60
Approach		233	1	0.123	3.9	LOS B	0	0	0	0.37	53.8
All Vehicles		345	1	0.123	4.4	NA	0.3	2.3	0.12	0.35	52.2

MOVEMENT SUMMARY

Site: Bay St / Government Rd - 2019 AM

MOVEMENT SUMMARY

Bay Street / Government Rd - AM Peak 2019 250 Lots**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

Mov ID	Turn	Demand		Deg.	Average	Level of	95% Back of Queue		Prop.	Effective	Average
		Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
East Government Rd (north)											
5	T	16	1	0.01	0.1	LOS A	0.1	0.4	0.13	0	57
6	R	2	1	0.01	14.7	LOS B	0.1	0.4	0.13	1.39	43.9
Approach		18	1	0.01	1.8	LOS B	0.1	0.4	0.13	0.15	54.9
North Bay St (west)											
7	L	4	1	0.095	8.6	LOS A	0.5	3.4	0.16	0.58	48.1
9	R	78	1	0.096	8.7	LOS A	0.5	3.4	0.16	0.64	48
Approach		82	1	0.096	8.7	LOS A	0.5	3.4	0.16	0.63	48
West Government Rd (south)											
10	L	35	1	0.023	8.4	LOS A	0	0	0	0.71	48.7
11	T	8	1	0.023	0	LOS A	0	0	0	0	60
Approach		43	1	0.023	6.8	LOS A	0	0	0	0.58	50.2
All Vehicles		143	1	0.096	7.3	NA	0.5	3.4	0.11	0.56	49.4

Bay Street / Government Rd - AM Peak 2019 250 Lots**Giveway / Yield (Two-Way)**

Movement Performance - Vehicles

Mov ID	Turn	Demand		Deg.	Average	Level of	95% Back of Queue		Prop.	Effective	Average
		Flow	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
East Government Rd (north)											
5	T	10	1	0.008	0.3	LOS A	0.1	0.4	0.2	0	55.1
6	R	4	1	0.008	13.2	LOS B	0.1	0.4	0.2	1.08	45.1
Approach		14	1	0.008	4	LOS B	0.1	0.4	0.2	0.31	51.5
North Bay St (west)											
7	L	2	1	0.049	8.8	LOS A	0.2	1.7	0.2	0.58	47.9
9	R	38	1	0.048	9	LOS A	0.2	1.7	0.2	0.63	47.8
Approach		40	1	0.048	9	LOS A	0.2	1.7	0.2	0.63	47.8
West Government Rd (south)											
10	L	85	1	0.053	8.2	LOS A	0	0	0	0.69	48.9
11	T	14	1	0.053	0	LOS A	0	0	0	0	60
Approach		99	1	0.053	7	LOS A	0	0	0	0.59	50
All Vehicles		153	1	0.053	7.3	NA	0.2	1.7	0.07	0.58	49.5