

DeWitt Consulting

Proposed Residential Estate

Development Application

Morisset Park Road, Morisset Park

Traffic Impact Study

Prepared by

Northern Transport Planning and Engineering Pty Ltd

A.B.N. 79 056 088 629

February 2008

071409



Contents

1. Introduction.....	2
2. Existing Traffic	2
Intersection Counts	2
Discussion.....	7
Automatic Vehicle Counts.....	8
Design Hour.....	9
3. Access.....	9
4. Trip Generation.....	9
5. Predicted Trip Distribution	10
6. Predicted Traffic Volumes – proposed Residential Development.....	11
7. Environmental Capacity	12
Morisset Park Road – Environmental Capacity per TRACON	13
Baldwin Boulevard – Environmental Capacity per TRACON.....	13
Victoria Street – Environmental Capacity per TRACON	14
8. Proposed Trinity Point Development off Morisset Park Rd.....	14
9. Predicted Traffic Flows vs Environmental Capacity	15
Discussion.....	15
10. Intersection Performance - Future Traffic Volumes Year 2018.....	15
11. SIDRA Analysis-2018 Predicted Traffic Volumes.....	21
Discussion.....	24
12. Discussion.....	24
13. Recommendations.....	24

1. INTRODUCTION

This report deals with subdivision for a proposed residential estate of land located at the corner of Morisset Park Road and Chifley Road, Morisset Park. Currently the site is 2(1) Residential.

The site comprises of Lot 9 in DP 244002 and Lot 358 in DP 755242 with an area of approximately 6.4 hectares. The proposed development consists of 72 residential lots ranging in size from 600 m² to 1000 m². Access will be provided by an internal road network connecting to both Morisset Park Road and Chifley Road.

Up to 8 lots will directly access Morisset Park Road, while up to 7 lots will directly access Chifley Road.

2. EXISTING TRAFFIC

Intersection Counts

Surveys of existing vehicle movements were undertaken in 2004 as part of the Rezoning application for this parcel of land. Further surveys were undertaken at the same intersections in December 2007 to record any significant changes in traffic flows in the local road network.

Below is a schedule of the survey completed by NTPE:

Intersection	AM Period		PM Period	
Morisset Park Rd/Fishery Point Rd	5/2/2004	7:30am-9:30am	5/2/2004	3:30pm-5:30pm
	13/12/07	7:30am-9.30am	13/12/2007	3:30pm-5:30pm
Fishery Point Rd/Baldwin Bvd	5/2/2004	7:30am-9:30am	5/2/2004	3:30pm-5:30pm
	13/12/2007	7:30am-9:30am	13/12/2007	Rain Interrupted Survey
Morisset Park Rd/Chifley Rd	1/5/2008	7:30am-9:30am	30/4/2008	3:00pm-5:00pm

A summary of the results of these surveys is presented in Figures 2-1 to 2-4 below: *(Full report attached as Appendix A).*

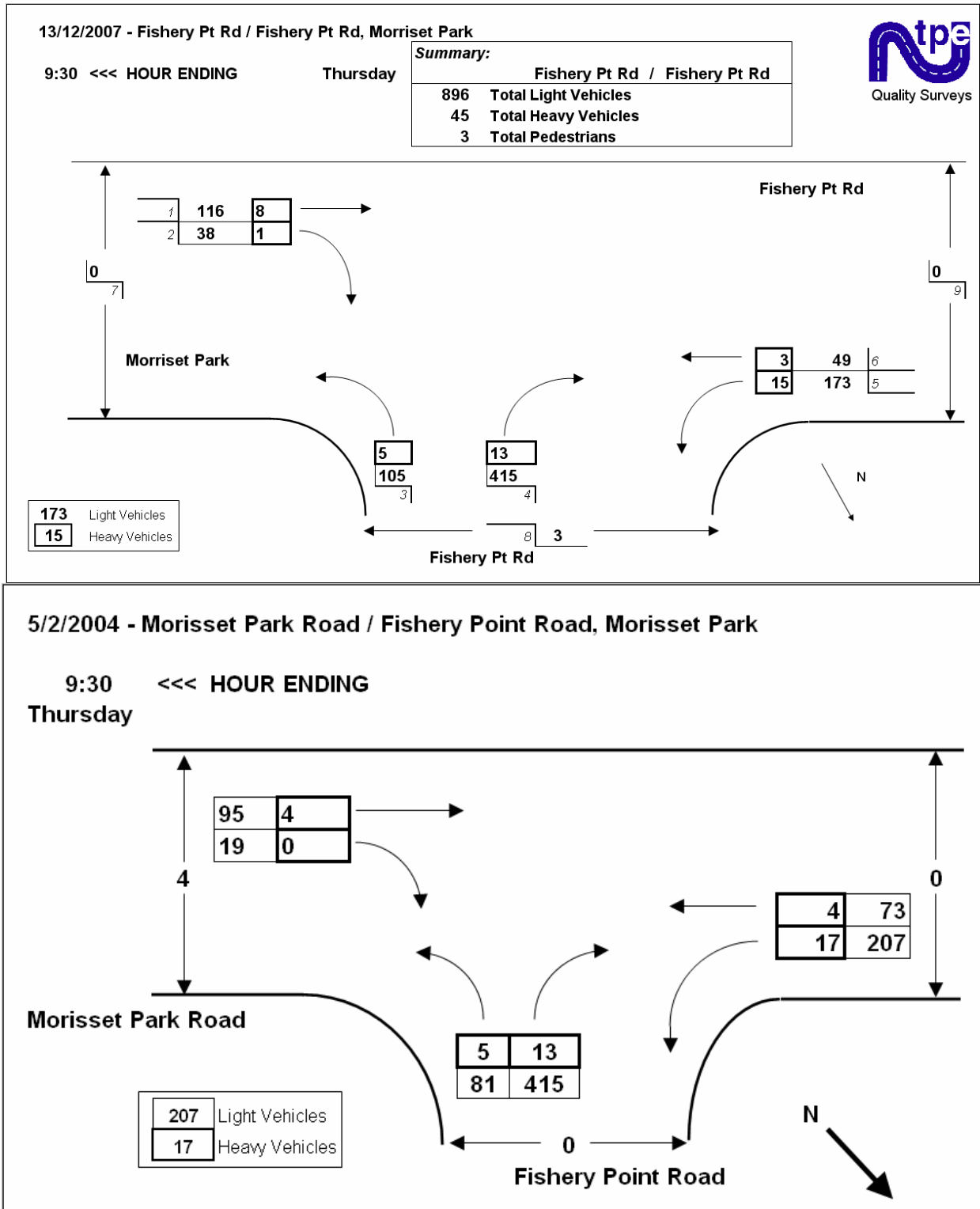


Figure 2-1: Morisset Park Road/Fishery Point Road – Existing AM Peak Hour Count 2004 & 2007

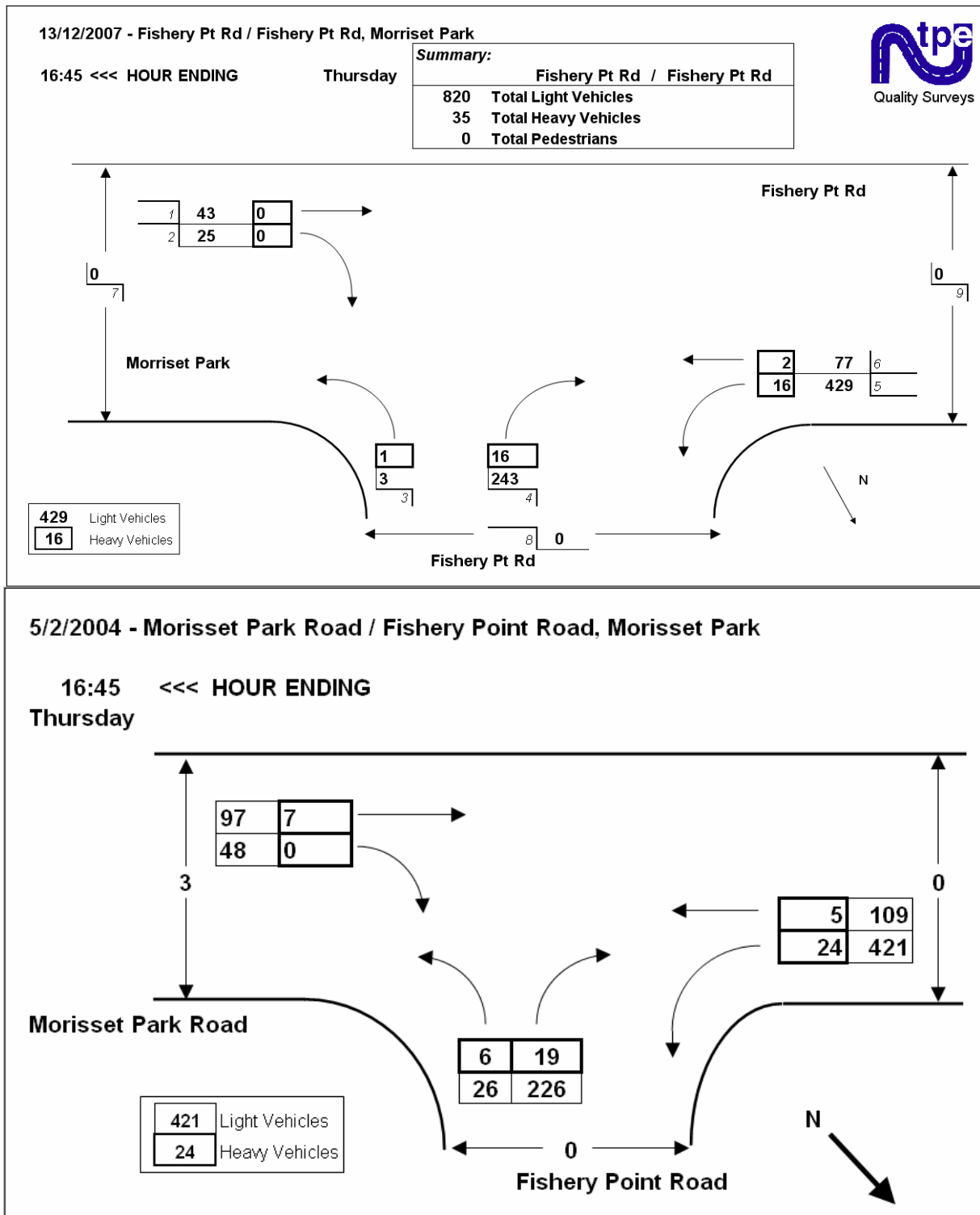


Figure 2-2: Morrisset Park Road/Fishery Point Road – Existing PM Peak Hour Count 2004 & 2007

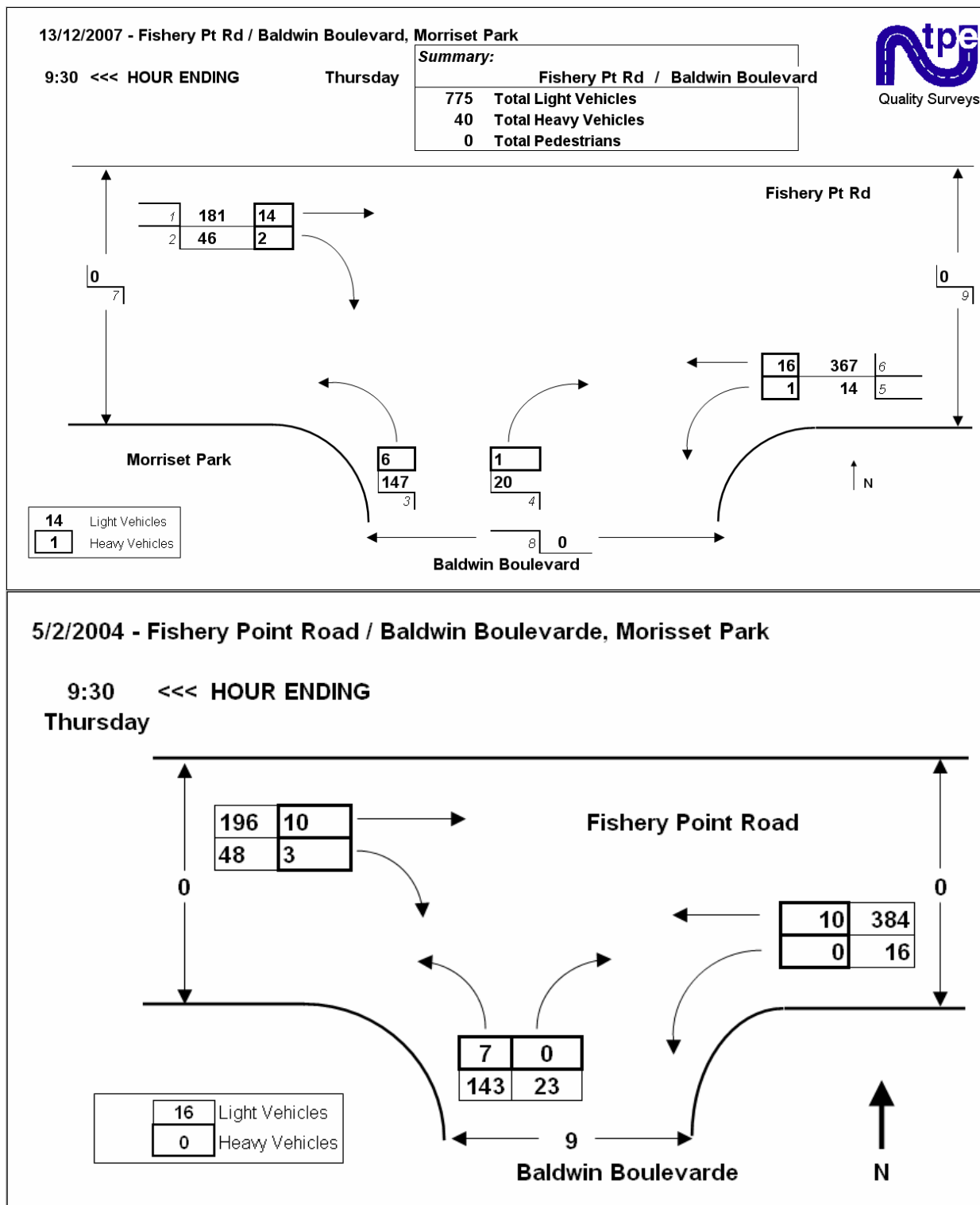


Figure 2-3: Fishery Point Road/Baldwin Boulevard – Existing AM Peak Hour Count 2004 & 2007

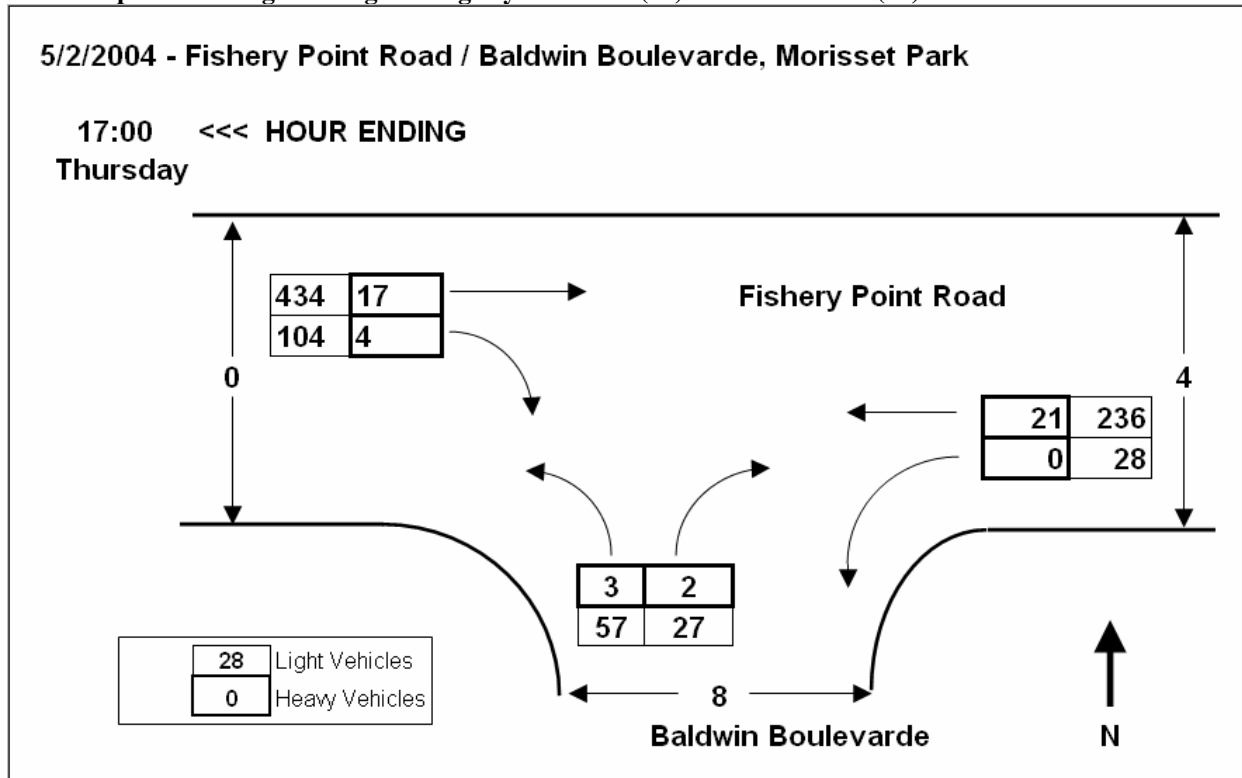


Figure 2-4: Fishery Point Road/Baldwin Boulevard – Existing PM Peak Hour Count 2004 (only)

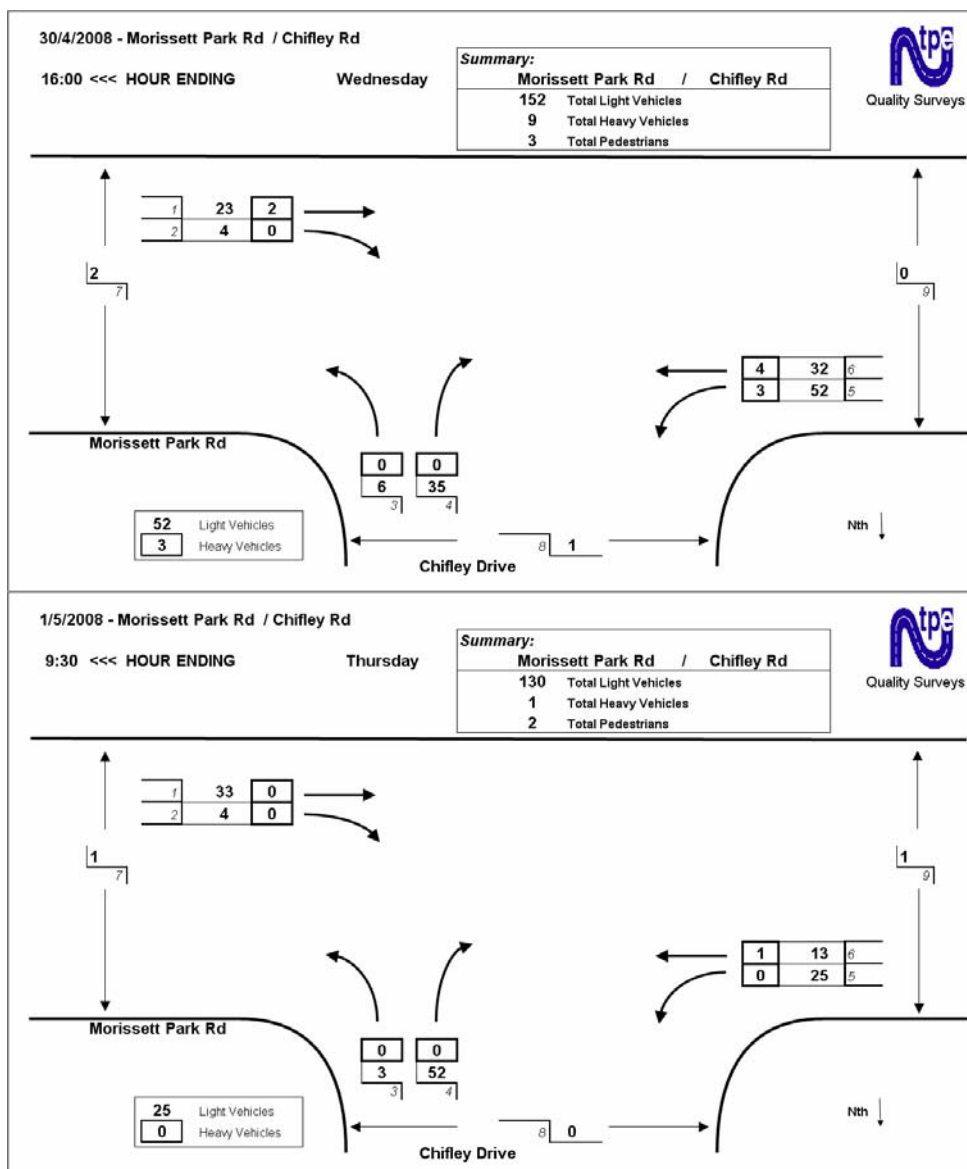


Figure 2-5: Chiffley Drive/Morisset Park Rd – Existing AM and PM Peak Hr Count

Discussion

A comparison of the surveys carried out in 2004 with those completed in 2007 indicates that traffic flows have not changed significantly. In fact some of the turning movements recorded in 2004 are greater than those observed in 2007.

The variation between these counts may be due to seasonal factors. Accordingly, it is considered that the counts carried out in 2004 provide a realistic indication of typical traffic flows and should be used in this assessment of the proposed development.

The comparison between automatic recorded in 2004 and 2007 also suggests that there has been no real growth in these traffic flows.

The survey at the intersection of Morisset Park Road and Chiffley Road was carried out to determine the interaction between Chiffley Road and the existing residential areas to the east off Morisset Park Road. The results of this survey show that approximately 15% of vehicles generated by the residential areas off Morisset Park Road east of Chiffley Drive use Chiffley Drive to access areas such as the Bolton Point Shopping Centre.

Automatic Vehicle Counts

Automatic Vehicle counts were carried out at the following sites in 2004:

Fishery Point Road	West of Morisset Park Road	Fri 6 th Feb to Thu 12 th Feb	Classification / Volume
Morisset Point Road	West of Silkyoak Drive	Wed 3 rd Mar to 6 th Mar	Classification / Volume
Baldwin Boulevard	South of Fishery Point Road	Sat 7 th Feb to Fri 13 th Feb	Classification / Volume
Victoria Street	West of Chifley Road	Fri 6 th Feb to Thu 12 th Feb	Classification / Volume

In 2007 Automatic Vehicle counts were carried out at the following sites

:			
Fishery Point Road	West of Morisset Park Road	11 th Dec to 19 th Dec	Classification / Volume
Morisset Point Road	West of Silkyoak Drive	11 th Dec to 19 th Dec	Classification / Volume
Baldwin Boulevard	South of Fishery Point Road	11 th Dec to 19 th Dec	Classification / Volume
Victoria Street	West of Chifley Road	11 th Dec to 19 th Dec	Classification / Volume

A summary of the results of the automatic surveys conducted is presented in Table 2-1 below: (A full report on the results of these automatic vehicle counts are attached as Appendix B).

Table 2-1: Summary - Traffic Volumes 2004 and 2007

Street	Nearest Side St	Direction		AM Peak	PM Peak	Daily
				9am – 10am	4pm – 5pm	
Fishery Point Road	West Morisset Park Rd	Eastbound	2004	286	544	5165
		Westbound	2004	451	323	5079
		Total	2004	737	867	10244
				9am – 10am	3pm – 4pm	
Morisset Park Road	West of Silkyoak Drive	Eastbound	2004	87	106	926
			2007	55	83	779
		Westbound	2004	89	110	895
			2007	72	52	733
		Total	2004	176	216	1821
			2007	127	135	1512
				9am – 10am	4pm – 5pm	
Baldwin Boulevard	South of Fishery Point Road	Northbound	2004	124	109	1524
			2007	146	100	1663
		Southbound	2004	71	143	1350
			2007	63	149	1435
		Total	2004	195	252	2874
			2007	209	249	3098
				9am – 10am	4pm – 5pm	
Victoria Street	South of Grant Street	Northbound	2004	44	51	486
			2007	38	31	388
		Southbound	2004	31	40	447
			2007	27	36	386
		Total	2004	75	91	933
			2007	65	67	774

Discussion

A comparison between these surveys and surveys carried out in 2004 again show that there has been no significant change and in some cases the traffic count in 2004 recorded higher traffic flows.

Design Hour

A review of the survey results indicates that the AM Peak Hour from 8:30am to 9:30am and the PM Peak Hour from 4:00pm to 5:00pm are the peak periods for this area.

Accordingly, it is proposed that the following hours should be used as the design hours for assessing the impact of the proposed development on the surrounding road network.

Design Peak Hour

AM Peak Hour 8:30am – 9:30am

PM Peak Hour 4:00pm – 5:00pm

3. ACCESS

Access to the site will be provided via the following two alternative routes:

Morriset Park Road	Collector Road
Chifley Road	Local Road

Local Road – provides access to individual allotments

Collector Road – provides a link between local roads and regional roads

Up to 8 lots will directly access Morisset Park Road, while up to 7 lots will directly access Chifley Road. The remaining 54 lots will have direct access to the internal road network.

4. TRIP GENERATION

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

	Daily Trips	Peak Hour Trips
Dwelling Houses	9	0.85

The number of trips calculated to be generated by the proposed development is shown below in Table 4-1.

Table 4-1: Trip Generation – Proposed Residential Development

	Dwellings	Trip Rate	Trips
<i>Daily Trips</i>	71	9	639
<i>Peak Hour Trips</i>	71	0.85	61

It is considered that approximately 75% of trips will be external trips. The remaining 25% of trips will use minor access roads to the east and internal roads to access schools and other facilities within the local area.

5. PREDICTED TRIP DISTRIBUTION

The proposed development is served effectively by four access routes as detailed below:

Morrisset Park Road	To and from Morrisset	Major Access Road
Baldwin Boulevard	To and from Bonnells Bay	Major Access Road
Pillapai Road	To and from Brightwaters	Minor Access Road
Kallaroo Rd	To and from Bonnells Bay	Minor Access Road

As stated in Section 4 it is considered that approximately 75% of trips will be external trips using either Morrisset Park Road or Baldwin Boulevard. The remaining 25% of trips will use the other access roads and internal roads to access schools and other facilities within the local area.

The trip distribution patterns assumed for external trips are based on traffic flows recorded at the intersection of Baldwin Boulevard and Fishery Point Road. Accordingly the predicted trip distribution adopted in this assessment is presented below in Table 5-1.

Table 5-1: Trip Distribution for Proposed Residential Development

	Lots	Total Trips	External Trips	Via Morrisset Park Road	Via Chifley Drive
<i>AM Peak Hour Trips</i>	71	61	46	39	7
<i>PM Peak Hour Trips</i>	71	61	46	34	11

6. PREDICTED TRAFFIC VOLUMES – PROPOSED RESIDENTIAL DEVELOPMENT

The predicted traffic volumes for the proposed residential estate at Morisset Park have been presented in Figures 6-1 and 6-2 below:

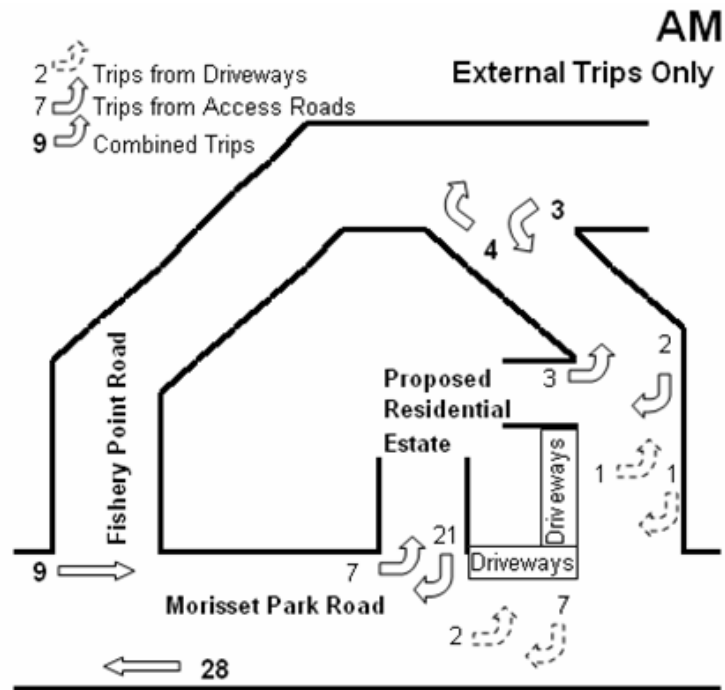


Figure 6-1: AM Peak Hour Trip Distribution - Proposed Development

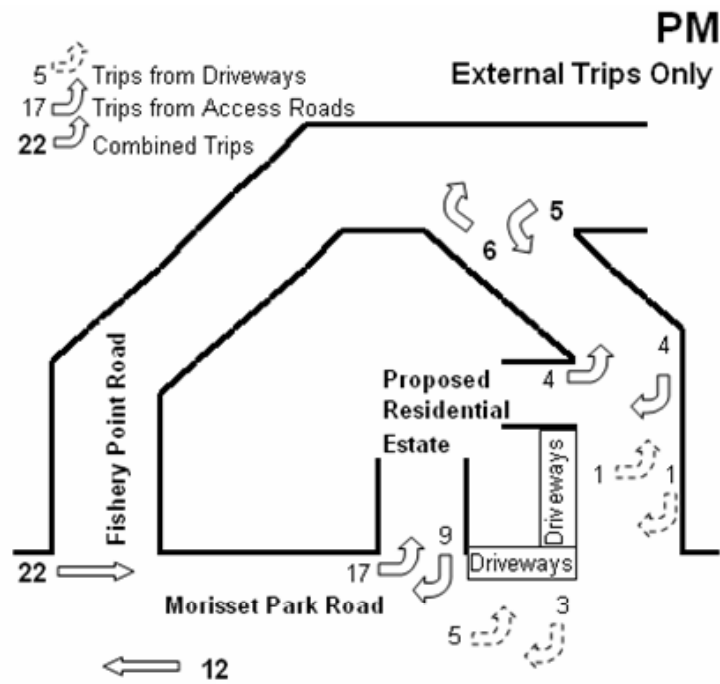


Figure 6-2: PM Peak Hour Trip Distribution - Proposed Development

7. ENVIRONMENTAL CAPACITY

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 7-1: 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 Baldwin Boulevard and Victoria Street perform as Access Streets and therefore would have an environmental capacity of 300 veh / hour. Morisset Park Road performs as a Collector road with a capacity of 500 vehicles.

The TRACON software developed by Brett Morrison of has also been used to estimate the Environmental Capacity of Morisset Park Road, Baldwin Boulevard and Victoria Street.

This software uses the general capacity measures defined by AMCORD together with a specific consideration of predicted noise levels based on road classification, road widths, vehicle speeds and pavement surface treatment.

Morrisset Park Road – Environmental Capacity per TRACON

Table 7-2 below presents a summary of Key assumptions used in the TRACON Model to calculate the Environmental Capacity of Morrisset Park Road.

Table 7-2: Morrisset Park Road – Parameters and Environmental Capacity per TRACON

Speed Limit (kph)	60
Width (metres)	7 metres
Classification	Collector
Heavy Vehicles	4%
Grade	0
Road Surface	Dense Grade AC
Average House Set Backs (metres)	15
Environmental Capacity	395
Vehicles per Hour (TRACON)	

Discussion

The TRACON software predicts a higher environmental capacity for Morrisset Park Road in comparison with AMCORD guidelines level of 300 vehicles / hour.

Baldwin Boulevard – Environmental Capacity per TRACON

Table 7-3 below presents a summary of Key assumptions used in the TRACON Model to calculate the Environmental Capacity of Baldwin Boulevard.

Table 7-3: Baldwin Boulevard – Parameters and Environmental Capacity per TRACON

Speed Limit (kph)	50
Width (metres)	7
Classification	Local Road
Heavy Vehicles	1%
Grade	0
Road Surface	Dense Grade AC
Average House Set Backs (metres)	15
Environmental Capacity	344
Vehicles per Hour (TRACON)	

Discussion

The TRACON software predicts a similar environmental capacity for Baldwin Boulevard in comparison with AMCORD guidelines level of 300 vehicles / hour.

Victoria Street – Environmental Capacity per TRACON

Table 7-4 below presents a summary of Key assumptions used in the TRACON Model to calculate the Environmental Capacity of Victoria Street.

Table 7-4: Victoria Street – Parameters and Environmental Capacity per TRACON

Speed Limit (kph)	50
Width (metres)	7.8
Classification	Local
Heavy Vehicles	0%
Grade	0
Road Surface	Dense Grade AC
Average House Set Backs (metres)	15
Environmental Capacity	329
Vehicles per Hour (TRACON)	

Discussion

The TRACON software predicts a similar environmental capacity for Victoria Street in comparison with AMCORD guidelines level of 300 vehicles / hour.

8. PROPOSED TRINITY POINT DEVELOPMENT OFF MORISSET PARK RD

The proposed Trinity Point development will provide up to 164 residential lots plus other components including 75 tourist accommodation units, restaurants, function rooms and a marina.

Traffic generated by these proposed development areas is detailed in Table 8-1 below:

		<i>Trip Rate</i>	<i>Peak Hour Trips</i>
Residential Lots	164 blocks	.85 trips / block	140
Tourist Accommodation etc.#			216
		Total	356

Note: # Trips generated by these components are based on data included in the Trinity Point Traffic Impact Study Report prepared by Building Better Futures

It is considered that the in / out distribution of these trips will be 40% / 60% in the AM Peak and 60% / 40% during the PM Peak.

Therefore, the predicted additional trips on Morisset Park Road east of Chiffley Drive would be:

Morisset Park Road	AM Peak	PM Peak
Eastbound	142	214
Westbound	214	142

Based on the intersection count at Morisset Park Rd and Chiffley Rd it is estimated that up to 15% of these trips will use Chiffley Rd.

9. PREDICTED TRAFFIC FLOWS VS ENVIRONMENTAL CAPACITY

Existing traffic flows have been added to predicted traffic flows generated by the proposed development to derive the peak hour traffic flows on sections of Benwerrin Avenue and Somerset Drive. The results for Options 1 and 2 are presented in Tables 9-1 and 9-2 below:

Table 9-1: Predicted Peak Hour Traffic Flows

		Baldwin Boulevard – South of Fishery Point Road						
		Before Development			After Development			
		Northbound	Southbound	Total	Northbound	Southbound	Total	Capacity
AM Peak		124	71	195	162	96	258	335
PM Peak		109	143	252	138	183	321	335

		Victoria Street – South of Grant Street						
		Before Development			After Development			
		Northbound	Southbound	Total	Northbound	Southbound	Total	Capacity
AM Peak		44	31	75	82	71	153	329
PM Peak		51	40	91	80	80	160	329

Discussion

This assessment indicates that the predicted traffic flows with the development can be accommodated on these local access roads.

10. INTERSECTION PERFORMANCE - FUTURE TRAFFIC VOLUMES YEAR 2018

Using existing intersection counts, and predicted traffic volumes from the proposed residential area, the traffic volumes at the intersections of Fishery Point Road/Morriset Park Road and Fishery Point Road/Baldwin Boulevard have been derived for planning year 2018. An annual growth rate of 2% will be used for the base traffic for all movements. The traffic volumes for the intersections of Fishery Point Road/Morriset Park Road and Morisset Park Rd/Chifley Dr with and without the proposed development are shown below in Figures 10-1 to 10-6.

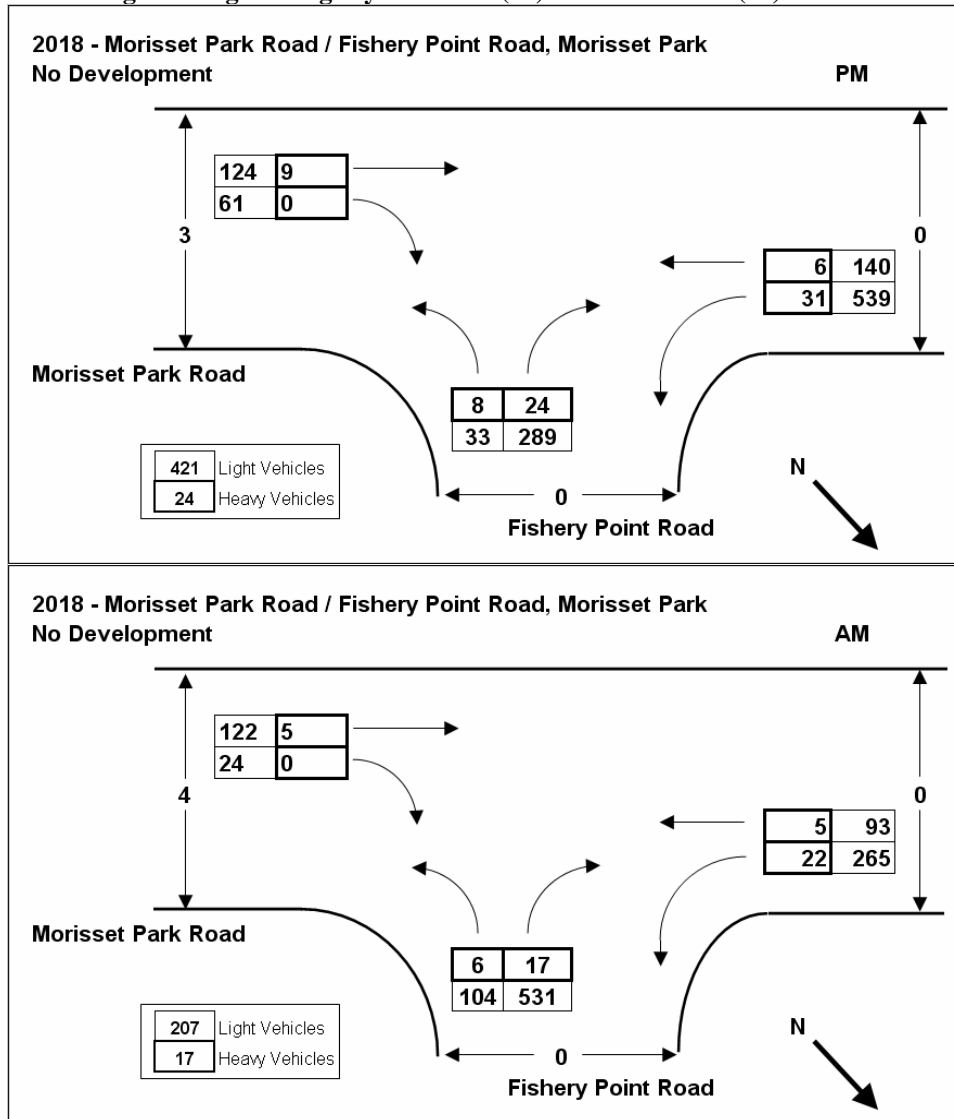


Figure 10-1: Fishery Point Rd/Morisset Park Rd 2018 Peak Period Traffic Volumes – No Development

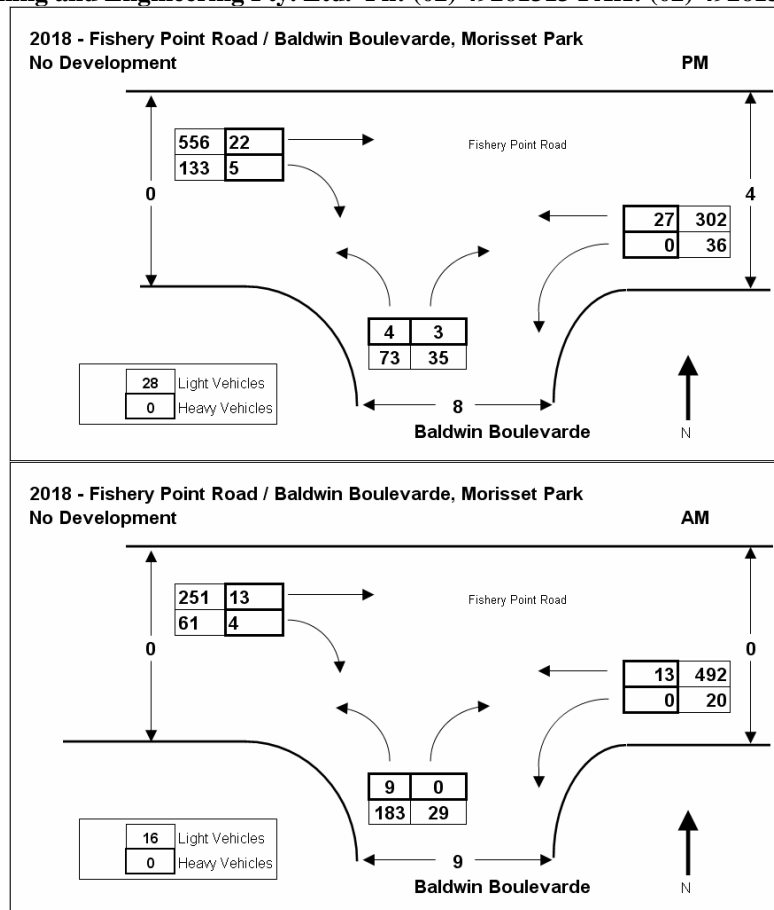


Figure 10-2: Fishery Point Rd/Baldwin Boulevard 2018 Peak Period Traffic Volumes – No Development

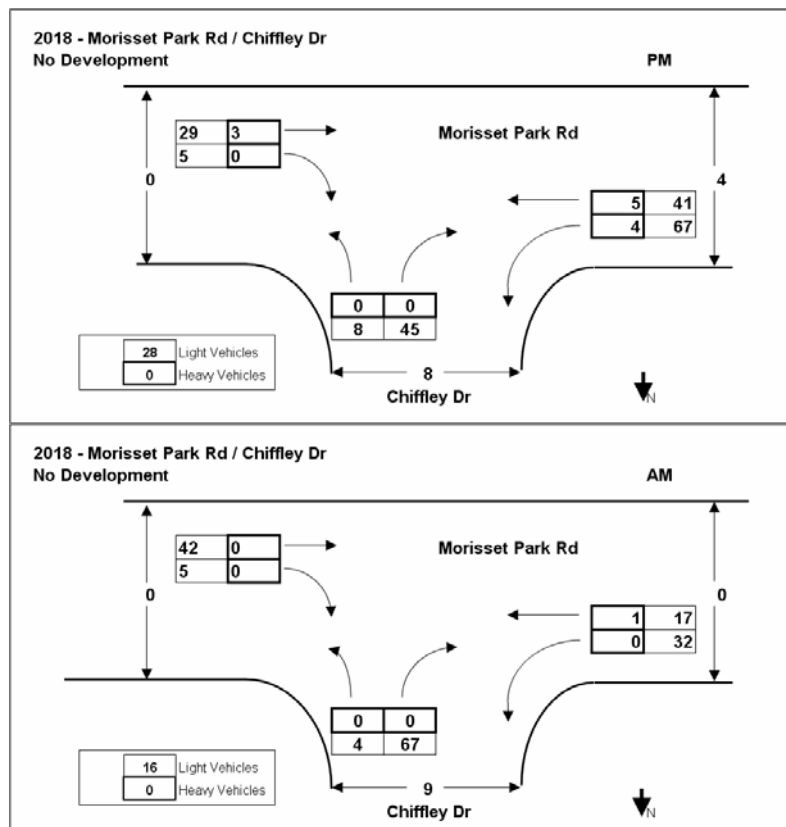


Figure 10-3: Morisset Park Rd/Chiffley Dr 2018 Peak Period Traffic Volumes – No Development



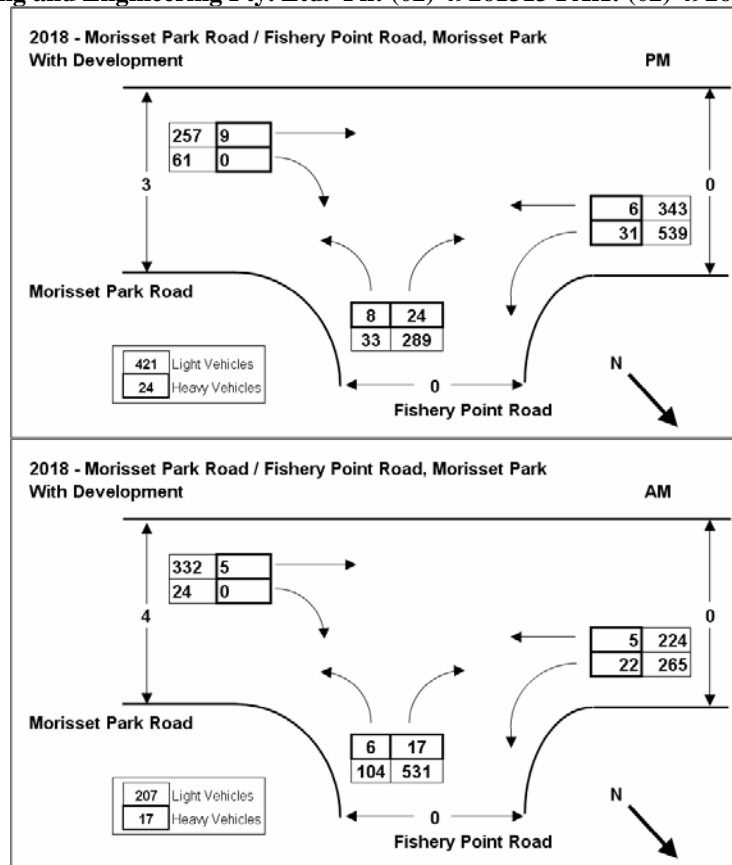


Figure 10-4: Fishery Point Rd/Morriset Park Rd 2018 Peak Period Traffic Volumes – With Development

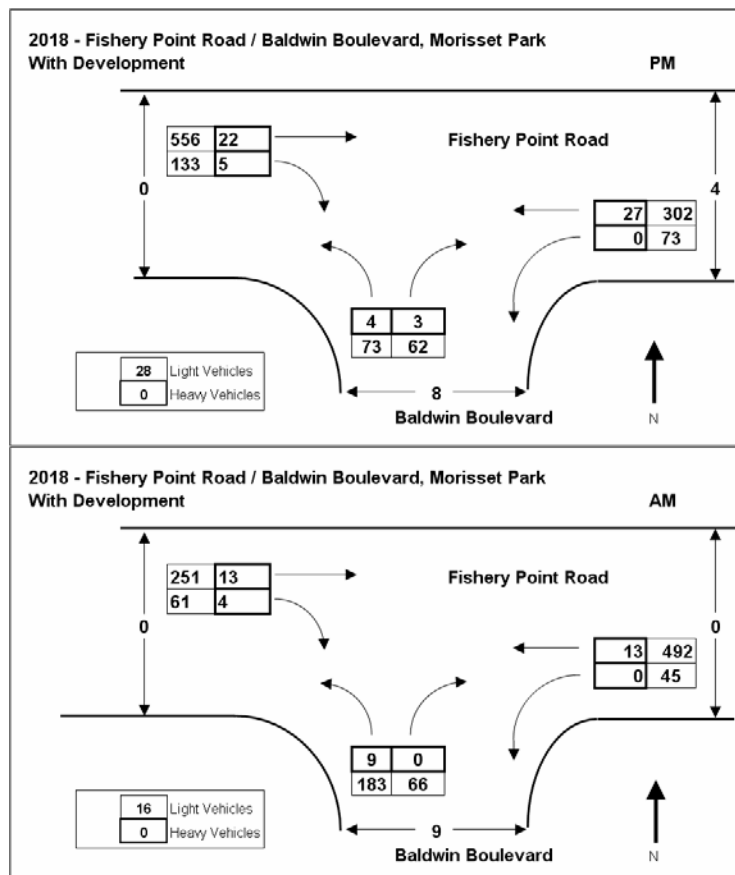


Figure 10-5: Fishery Point Rd/Baldwin Boulevard 2018 Peak Traffic Volumes – With Development

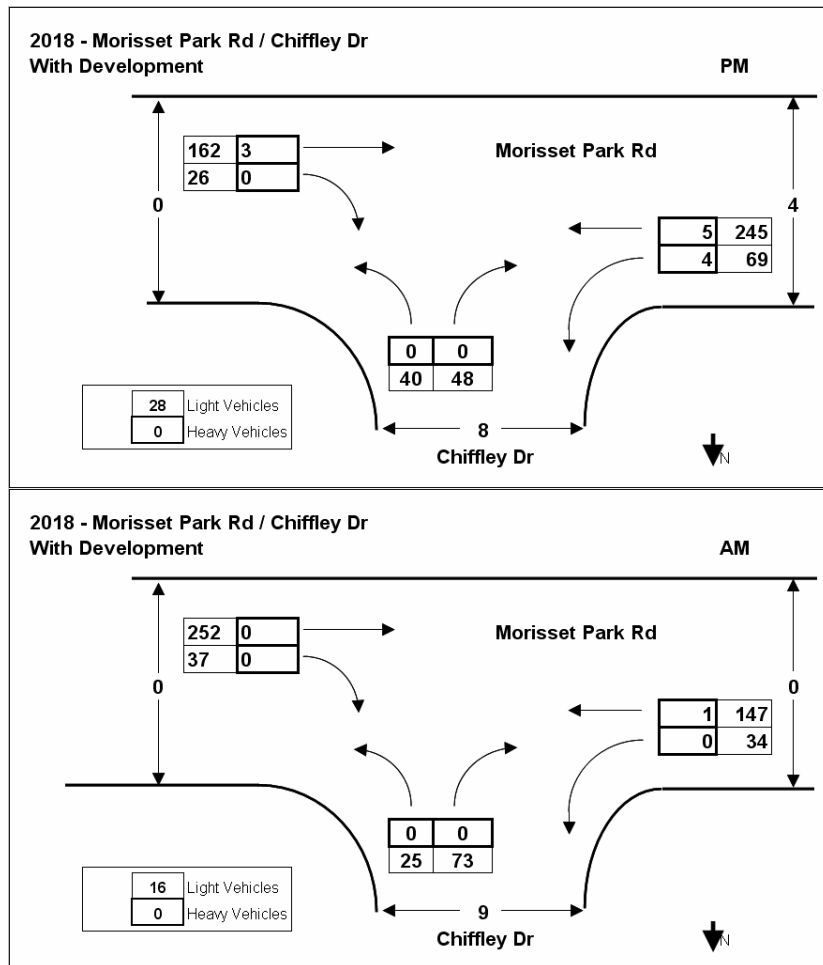


Figure 10-6: Morisset Park Rd/Chiffley Dr 2018 Peak Period Traffic Volumes – With Development

11. SIDRA ANALYSIS-2018 PREDICTED TRAFFIC VOLUMES

SIDRA analysis was performed on the intersections of Fishery Point Road/Morriset Park Road, Fishery Point Road/Baldwin Boulevard and Chiffley Drive/Morriset Park Rd using predicted volumes for year 2018 to determine the levels of performance for the intersections in the future with the proposed developments. The results of the SIDRA analysis are shown below in Tables 11-1 to 11-6.

Table 11-1: SIDRA Results – Fishery Point Rd/Morriset Park Rd – AM Peak – 2018 – With Development

Fishery Point Road/Morriset Park Road											
2018 AM Peak With Development											
Give-way											
Vehicle Movements											
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)	
Morriset Park											
5	T	337	1.5	0.200	2.8	LOS A	15	0.60	0.00	38.8	
6	R	24	0.0	0.200	11.1	LOS B	15	0.60	0.82	45.9	
Approach		361	1.4	0.200	3.3	LOS A	15	0.60	0.05	39.2	
Fishery Point Road											
7	L	110	5.5	0.273	11.2	LOS B	9	0.61	0.79	34.5	
9	R	548	3.1	2.228	1142.2	LOS F	1458	1.00	9.22	1.8	
Approach		658	3.5	2.228	953.1	LOS F	1458	0.93	7.81	2.2	
Fishery Point Road											
10	L	287	7.7	0.282	8.5	LOS A	0	0.00	0.67	49.0	
11	T	229	2.2	0.282	0.0	LOS A	0	0.00	0.00	60.0	
Approach		516	5.2	0.282	4.7	LOS A		0.00	0.37	53.3	
All Vehicles		1535	3.6	2.228	410.9	Applicable	1458	0.54	3.49	4.7	

Table 11-2: SIDRA Results – Fishery Point Rd/Morriset Park Rd – PM Peak – 2018 – With Development

Fishery Point Road/Morriset Park Road											
2018 PM Peak With Development											
Give-way											
Vehicle Movements											
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)	
Morriset Park											
5	T	266	3.4	0.261	8.9	LOS A	27	0.92	0.00	36.2	
6	R	61	0.0	0.261	17.2	LOS C	27	0.92	1.02	40.6	
Approach		327	2.8	0.260	10.5	LOS B	27	0.92	0.19	36.9	
Fishery Point Road											
7	L	41	19.5	0.184	23.6	LOS C	7	0.80	0.92	29.0	
9	R	313	7.7	2.445	1364.4	LOS F	949	1.00	6.32	1.5	
Approach		354	9.0	2.449	1209.1	LOS F	949	0.98	5.70	1.7	
Fishery Point Road											
10	L	570	5.4	0.500	8.4	LOS A	0	0.00	0.67	49.0	
11	T	349	1.7	0.500	0.0	LOS A	0	0.00	0.00	60.0	
Approach		919	4.0	0.500	5.2	LOS A		0.00	0.41	52.6	
All Vehicles		1600	4.9	2.445	272.6	Applicable	949	0.40	1.54	6.9	

Table 11-3: SIDRA Results – Fishery Point Rd/Baldwin Bvd – AM Peak – 2018 – With Development

Fishery Point Road/Baldwin Boulevard										
2018 AM Peak with Development										
Give-way										
Vehicle Movements										
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
Baldwin Boulevard										
1	L	192	4.7	0.474	20.5	LOS C	27	0.76	1.06	34.6
3	R	66	0.0	0.317	30.8	LOS D	13	0.85	1.01	29.6
Approach		258	3.5	0.474	23.1	LOS C	27	0.79	1.04	33.2
Fishery Point Road										
4	L	45	0.0	0.287	8.2	LOS A	0	0.00	0.67	49.0
5	T	505	2.6	0.288	0.0	LOS A	0	0.00	0.00	60.0
Approach		550	2.4	0.288	0.7	LOS A		0.00	0.05	58.9
Fishery Point Road										
11	T	264	4.9	0.135	0.0	LOS A	0	0.00	0.00	60.0
12	R	65	6.2	0.072	11.0	LOS B	3	0.52	0.76	46.2
Approach		329	5.2	0.135	2.2	LOS A	3	0.10	0.15	56.7
All Vehicles		1137	3.4	0.474	6.2	Applicable	27	0.21	0.31	49.7

Table 11-4: SIDRA Results – Fishery Point Rd/Baldwin Bvd – PM Peak – 2018 – With Development

Fishery Point Road/Baldwin Boulevard										
2018 PM Peak with Development										
Give-way										
Vehicle Movements										
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
Baldwin Boulevard										
1	L	77	5.2	0.155	12.2	LOS B	6	0.59	0.78	39.9
3	R	65	4.6	0.524	58.3	LOS F	22	0.94	1.10	21.5
Approach		142	4.9	0.524	33.3	LOS D	22	0.75	0.92	28.7
Fishery Point Road										
4	L	73	0.0	0.217	8.2	LOS A	0	0.00	0.67	49.0
5	T	329	8.2	0.217	0.0	LOS A	0	0.00	0.00	60.0
Approach		402	6.7	0.217	1.5	LOS A		0.00	0.12	57.6
Fishery Point Road										
11	T	578	3.8	0.296	0.0	LOS A	0	0.00	0.00	60.0
12	R	138	3.6	0.126	10.1	LOS B	5	0.46	0.73	46.9
Approach		716	3.8	0.296	2.0	LOS A	5	0.09	0.14	57.0
All Vehicles		1260	4.8	0.524	5.3	Applicable	22	0.13	0.22	51.5

Table 11-5: SIDRA Results – Chiffley Dr/Morrisset Park Rd – AM Peak – 2018 – With Development

Morrisset Park Rd / Chiffley Dr										
2018 AM Peak with Development										
Give-way										
Vehicle Movements										
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
Fishery Point Road										
5	T	252	0.0	0.150	0.0	LOS A	0	0.00	0.00	60.0
6	R	39	0.0	0.150	8.4	LOS A	0	0.00	0.70	48.6
Approach		291	0.0	0.150	1.1	LOS A		0.00	0.09	58.2
Chiffley Drive										
7	L	26	0.0	0.055	8.2	LOS A	0	0.00	0.67	49.0
9	R	77	0.0	0.055	8.4	LOS A	0	0.00	0.70	48.6
Approach		103	0.0	0.055	8.4	LOS A		0.00	0.69	48.7
Morrisset Park Rd										
10	L	36	0.0	0.095	8.2	LOS A	0	0.00	0.67	49.0
11	T	148	0.7	0.096	0.0	LOS A	0	0.00	0.00	60.0
Approach		184	0.5	0.096	1.6	LOS A		0.00	0.13	57.5
All Vehicles		578	0.2	0.150	2.6	Applicable	0	0.00	0.21	56.0

Table 11-6: SIDRA Results – Chiffley Dr/Morrisset Park Rd – PM Peak – 2018 – With Development

Morrisset Park Rd / Chiffley Dr										
2018 PM Peak with Development										
Give-way										
Vehicle Movements										
Mov ID	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
Morrisset Park Road										
5	T	165	1.8	0.100	0.0	LOS A	0	0.00	0.00	60.0
6	R	27	0.0	0.100	8.4	LOS A	0	0.00	0.70	48.6
Approach		192	1.6	0.100	1.2	LOS A		0.00	0.10	58.1
Chiffley Drive										
7	L	42	0.0	0.050	8.2	LOS A	0	0.00	0.67	49.0
9	R	51	0.0	0.050	8.4	LOS A	0	0.00	0.70	48.6
Approach		93	0.0	0.050	8.3	LOS A		0.00	0.69	48.8
Morrisset Park Rd										
10	L	77	5.2	0.173	8.4	LOS A	0	0.00	0.67	49.0
11	T	250	2.0	0.173	0.0	LOS A	0	0.00	0.00	60.0
Approach		327	2.8	0.173	2.0	LOS A		0.00	0.16	57.0
All Vehicles		612	2.0	0.173	2.7	Applicable	0	0.00	0.22	55.9

Discussion

This assessment indicates that the intersection of Chiffley Dr/Morriset Park Road will be able to accommodate the predicted traffic flows with the proposed development at LOS A.

The intersection Baldwin Boulevard and Fishery Point Road will be able to accommodate the predicted traffic flows with the proposed development in the AM Peak. However, in the PM Peak the traffic turning right out of Baldwin Boulevard will experience some difficulties. The provision of a type C intersection would resolve this problem. The main factor leading to this problem is the increase in through traffic on Fishing Point Road and the proposed development makes only a minor contribution to the traffic flows causing this problem.

The existing intersection layout at Morriset Park Road and Fishery Point Road will experience difficulties by year 2018 with the proposed developments in both the AM and PM peak period. This issue has been identified in other studies and it is proposed that this intersection control will be upgraded to traffic control signals. The cost of providing this upgrade will be apportioned to the different developments approved or under consideration in this area. Based on the additional traffic generated by this development it could be reasonable for this development to share up to 11% of the cost of this upgrade.

Discussions with David Young from the RTA earlier this year suggested that Lake Macquarie City Council was setting up a Section 94 Contributions Plan to address this issue and that these arrangements had been initiated prior to the Trinity Point Development being submitted to Council.

12. DISCUSSION

The environmental capacity of Victoria Street and Baldwin Boulevard is adequate to accommodate predicted traffic flows. Other local roads would also be able to accommodate any minor flows that may be generated by the proposed development.

The intersection of Baldwin Boulevard and Fishing Point Road may require upgrading in year 2018 to reduce delays for vehicles turning right out of Baldwin Boulevard.

This assessment confirm that the intersection of Morriset Park Road and Fishery Point Road will require upgrading with the installation of traffic control signals.

13. RECOMMENDATIONS

Based on this assessment of predicted traffic impacts it is recommended that the proposed development be approved.

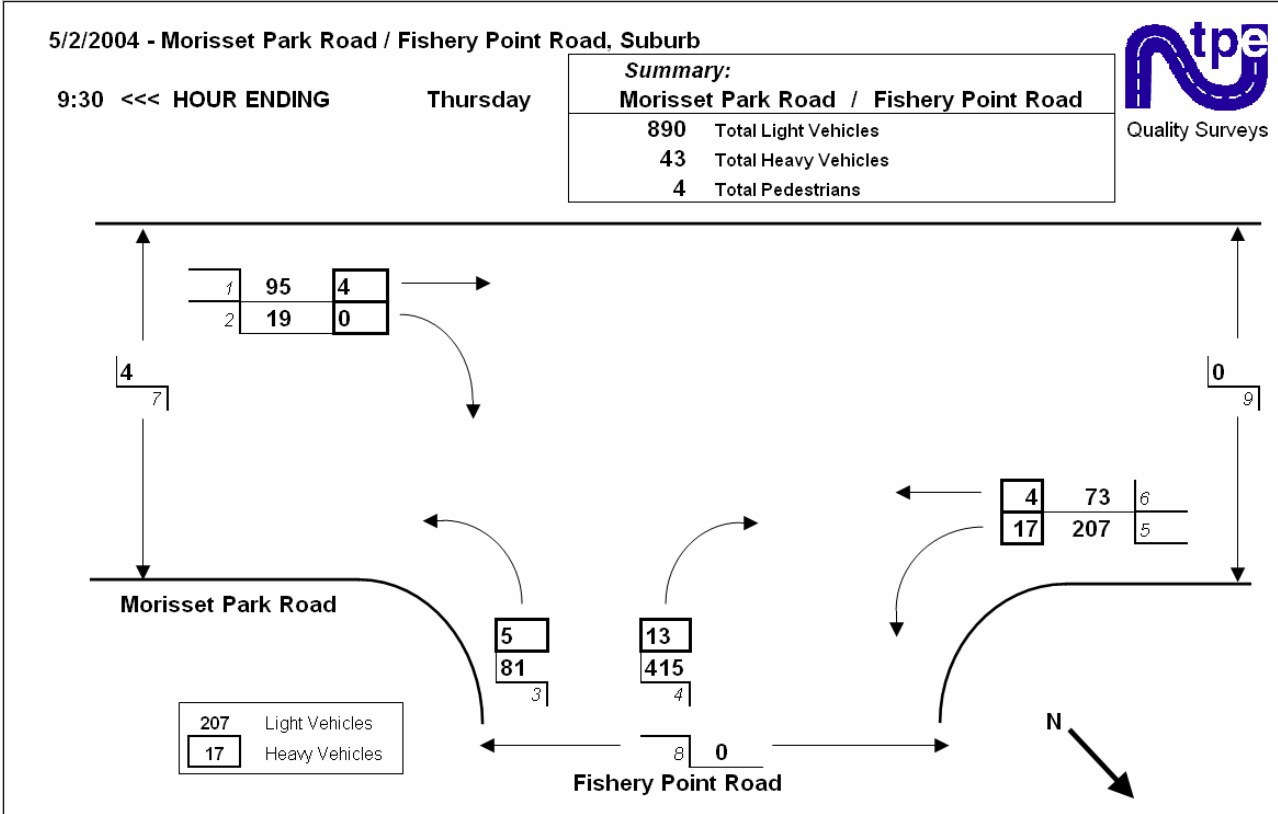
Appendix A

Existing Turning Movements

Morisset Park Road and Fishery Point Road

Fishery Point Road and Baldwin Boulevard

Chiffley Drive and Morisset Park Rd



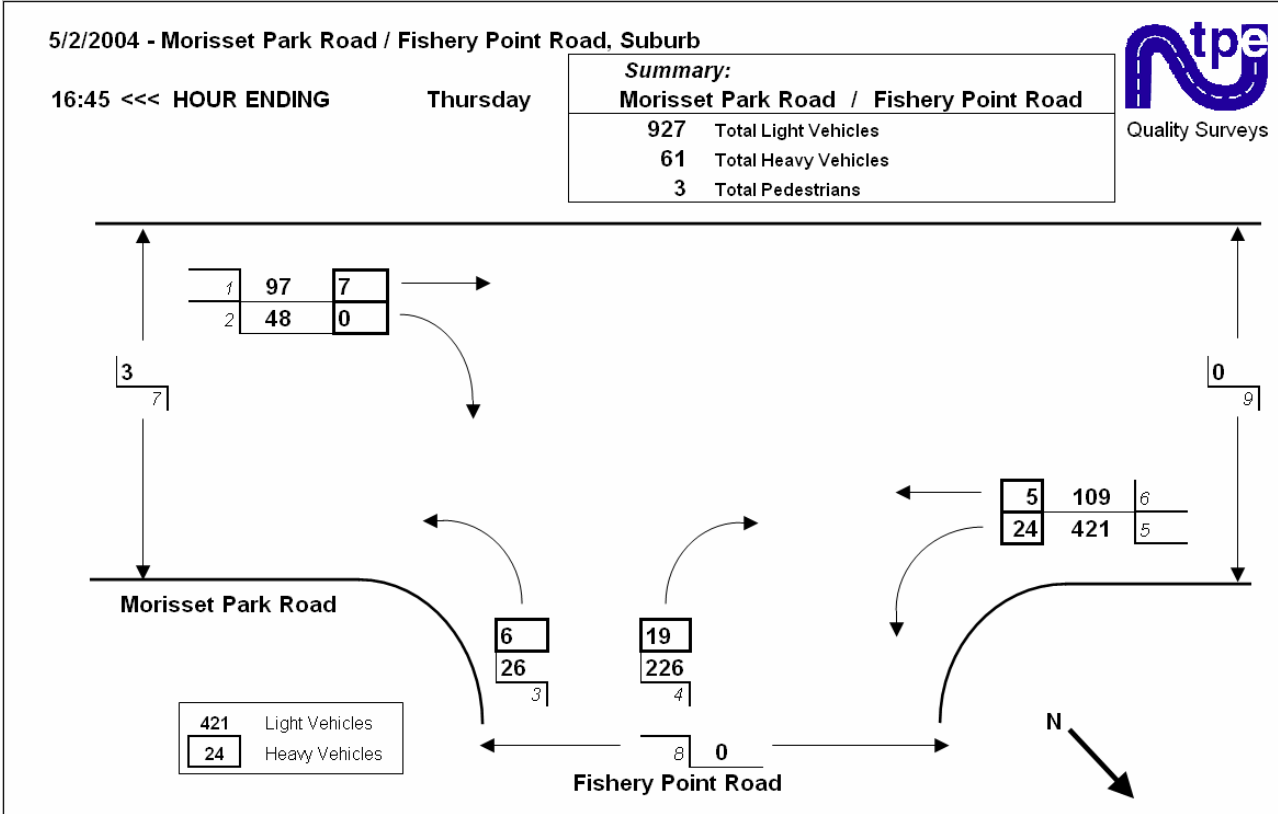
5/2/2004 - Morisset Park Road / Fishery Point Road, Suburb

	Light Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
07:45	10	1	3	102	38	11	0	0	0	165	
08:00	21	0	3	108	26	8	2	0	0	166	
08:15	21	3	2	102	36	11	0	0	0	175	
08:30	25	4	1	97	26	14	1	0	0	167	673
08:45	16	2	3	120	36	13	2 <	0	0	190	698
09:00	23	1	4	116 <	66	18	0	0	0	228	760
09:15	25	5	30	95	47	24	2 <	0	0	226	811
09:30	31 <	11 <	44 <	84	58 <	18 <	0	0	0	246	890 <

	Heavy Vehicles						Total Vehicles	
	1	2	3	4	5	6	15 MIN	HOUR
07:45	1	0	0	3	7	0	11	
08:00	1	0	0	2	1	1	5	
08:15	0	1	0	2	5	1	9	
08:30	2 <	0 <	0	6 <	1	0	9	34
08:45	0	0 <	0	3 <	3	0	6	29
09:00	0	0 <	0	2 <	7	2	11	35
09:15	2 <	0	4	1	4	1	12	38
09:30	2 <	0	1 <	7 <	3 <	1 <	14	43 <

	All Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
07:45	11	1	3	105	45	11	0	0	0	176	
08:00	22	0	3	110	27	9	2	0	0	171	
08:15	21	4	2	104	41	12	0	0	0	184	
08:30	27	4	1	103	27	14	1	0	0	176	707
08:45	16	2	3	123	39	13	2 <	0	0	196	727
09:00	23	1	4	118 <	73	20	0	0	0	239	795
09:15	27	5	34	96	51	25	2 <	0	0	238	849
09:30	33 <	11 <	45 <	91	61 <	19 <	0	0	0	260	933 <

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



5/2/2004 - Morisset Park Road / Fishery Point Road, Suburb

	Light Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
15:45	17	11	14	55	72	20	0	0	0	189	
16:00	15	6	11	55	102	41	3	0	0	230	
16:15	43	32	14	51	114	26	0	0	0	280	
16:30	22 <	6 <	0 <	59	102	22 <	0 <	0	0	211	910
16:45	17 <	4	1	61	103	20 <	0 <	0	0	206	927 <
17:00	11	1	1	62 <	118	24	0	0	0	217	914
17:15	20	3	4	44	119	14	2	0	0	204	838
17:30	13	1	1	63	111 <	10	0	0	0	199	826

	Heavy Vehicles						Total Vehicles	
	1	2	3	4	5	6	15 MIN	HOUR
15:45	2	0	0	6	2	1	11	
16:00	0	0	0	4	10	2	16	
16:15	3	0	6	4	5	0	18	
16:30	3 <	0	0 <	2	4	2 <	11	56
16:45	1	0	0 <	9	5 <	1 <	16	61 <
17:00	0	0	0 <	7 <	3	1	11	56
17:15	0	0	0	1	2	1 <	4	42
17:30	0	0	2	3	0	0	5	36

	All Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
15:45	19	11	14	61	74	21	0	0	0	200	
16:00	15	6	11	59	112	43	3	0	0	246	
16:15	46	32	20	55	119	26	0	0	0	298	
16:30	25 <	6 <	0 <	61	106	24 <	0 <	0	0	222	966
16:45	18	4	1	70	108	21 <	0 <	0	0	222	988 <
17:00	11	1	1	69 <	121	25	0	0	0	228	970
17:15	20	3	4	45	121	15	2	0	0	208	880
17:30	13	1	3	66	111 <	10	0	0	0	204	862

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

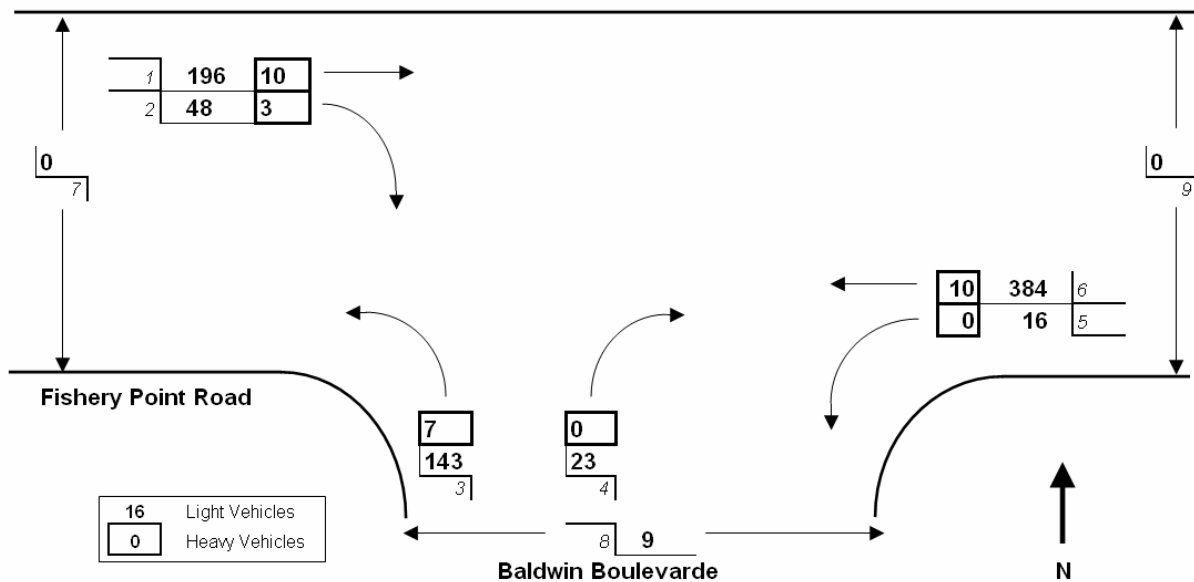


5/2/2004 - Fishery Point Road / Baldwin Boulevard, Suburb

9:30 <<< HOUR ENDING Thursday

Summary:
Fishery Point Road / Baldwin Boulevard

810	Total Light Vehicles
30	Total Heavy Vehicles
9	Total Pedestrians



5/2/2004 - Fishery Point Road / Baldwin Boulevard, Suburb

Light Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles 15 MIN HOUR	
07:45	26	14	40	3	1	77	0	3	0	161	
08:00	25	8	23	4	5	92	0	1	0	157	
08:15	25	9	29	2	2	83	0	1	0	150	
08:30	30	6	34	2	6	79	0	0	0	157	625
08:45	42	8	37	6	3	101	0	3	0	197	661
09:00	47	12	33	5	5	105	0	6 <	0	207	711
09:15	48	13	44 <	6	5 <	92	0	0	0	208	769
09:30	59 <	15 <	29	6 <	3	86 <	0	0	0	198	810 <

Heavy Vehicles

	1	2	3	4	5	6	Total Vehicles 15 MIN HOUR	
07:45	5	1	1	0	0	2	9	
08:00	1	0	0	0	0	3	4	
08:15	5	0	0	0	0	1	6	
08:30	1 <	0	2	0	0	3	6 25	
08:45	2	0	0	0	0	2	4 20	
09:00	4 <	2	0	0	0	2	8 24	
09:15	2	1 <	3	0	0	2	8 26	
09:30	2	0 <	4 <	0	0	4 <	10 30 <	

All Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles 15 MIN HOUR	
07:45	31	15	41	3	1	79	0	3	0	170	
08:00	26	8	23	4	5	95	0	1	0	161	
08:15	30	9	29	2	2	84	0	1	0	156	
08:30	31	6	36	2	6	82	0	0	0	163	650
08:45	44	8	37	6	3	103	0	3	0	201	681
09:00	51	14	33	5	5	107	0	6 <	0	215	735
09:15	50	14	47 <	6	5 <	94	0	0	0	216	795
09:30	61 <	15 <	33	6 <	3	90 <	0	0	0	208	840 <

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



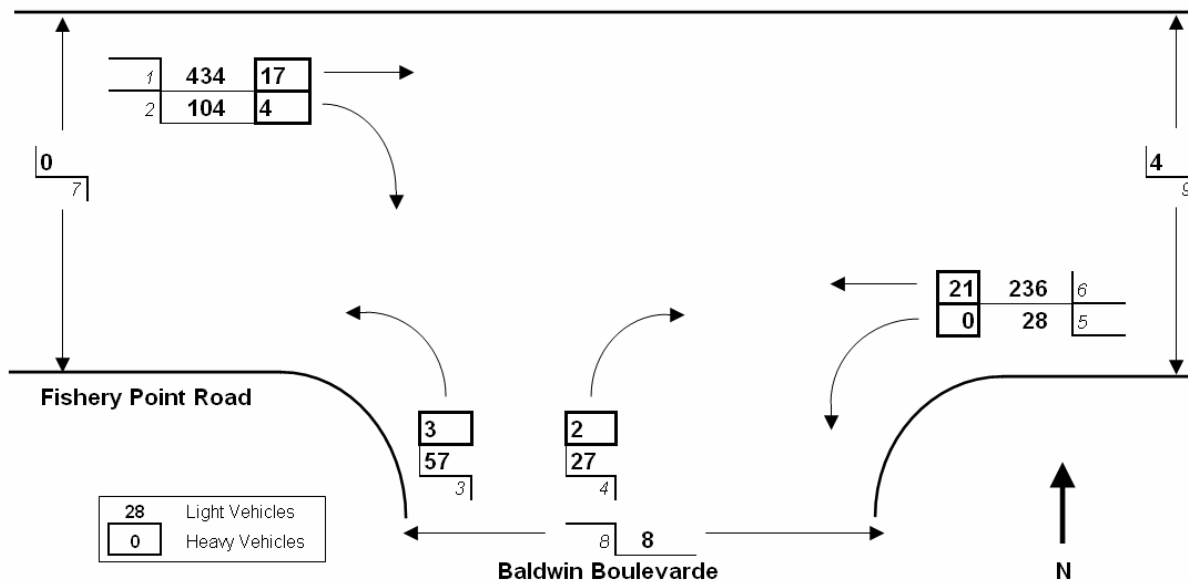
5/2/2004 - Fishery Point Road / Baldwin Boulevard, Suburb

17:00 <<< HOUR ENDING Thursday

Summary:

Fishery Point Road / Baldwin Boulevard

886	Total Light Vehicles
47	Total Heavy Vehicles
12	Total Pedestrians



5/2/2004 - Fishery Point Road / Baldwin Boulevard, Suburb

	Light Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
15:45	65	11	25	3	2	50	0	0	0	156	
16:00	84	23	27	1	3	60	0	0	0	198	
16:15	121	29	12	8	3	54	0	6	2	227	
16:30	113	20	18 <	8	7	55	0	0	2 <	221	802
16:45	101	24	13	5	7	58	0	0	0 <	208	854
17:00	99 <	31 <	14	6	11	69	0	2 <	0 <	230	886
17:15	114	28	12	10	14	51	1 <	4	0	229	888
17:30	103	16	13	13 <	11 <	71 <	0 <	0	0	227	894 <

	Heavy Vehicles						Total Vehicles	
	1	2	3	4	5	6	15 MIN	HOUR
15:45	4	0	0	0	0	7	11	
16:00	6	1	0	1	0	5	13	
16:15	7	3	2	2	0	7	21	
16:30	3 <	1 <	1 <	0 <	0	1	6	51 <
16:45	4 <	0 <	0 <	0 <	0	7	11	51 <
17:00	3	0	0 <	0	0	6 <	9	47
17:15	3	0	0	0	0	2	5	31
17:30	0	1	1	0	0	4	6	31

	All Vehicles									Total Vehicles	
	1	2	3	4	5	6	7	8	9	15 MIN	HOUR
15:45	69	11	25	3	2	57	0	0	0	167	
16:00	90	24	27	2	3	65	0	0	0	211	
16:15	128	32	14	10	3	61	0	6	2	248	
16:30	116	21	19 <	8	7	56	0	0	2 <	227	853
16:45	105	24	13	5	7	65	0	0	0 <	219	905
17:00	102 <	31 <	14	6	11	75	0	2 <	0 <	239	933 <
17:15	117	28	12	10	14	53	1 <	4	0	234	919
17:30	103	17	14	13 <	11 <	75 <	0 <	0	0	233	925

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



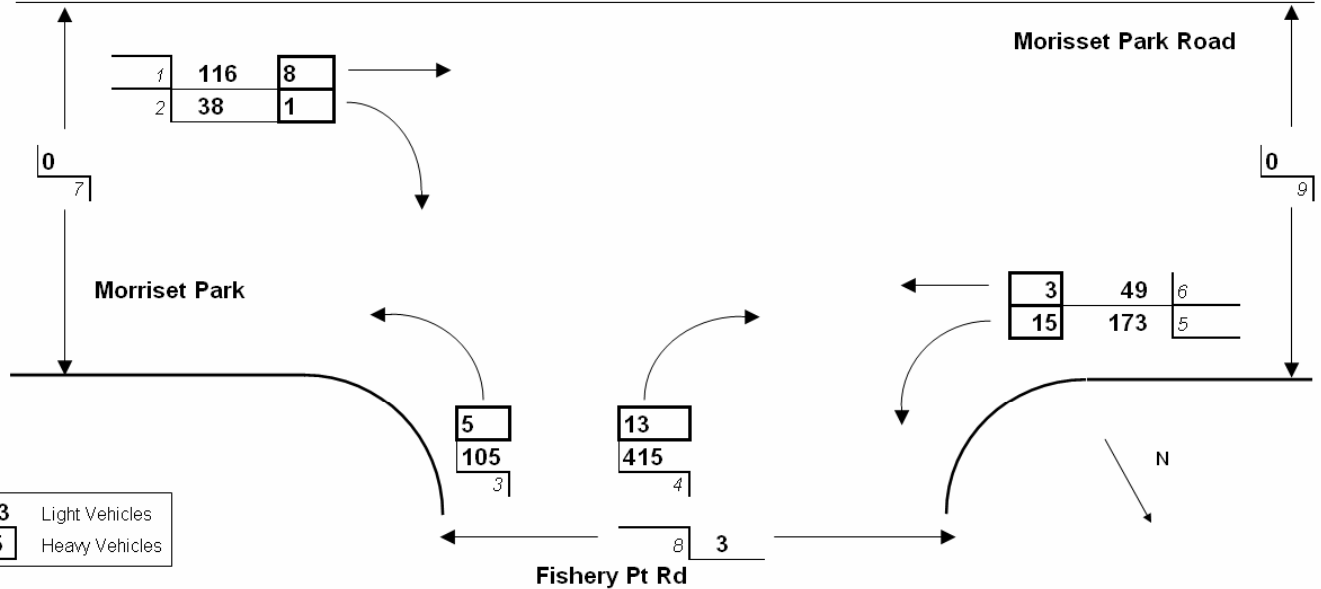
13/12/2007 - Morisset Park Road / Fishery Pt Rd, Morriset Park

9:30 <<< HOUR ENDING

Thursday

Summary:

Morisset Park Road / Fishery Pt Rd	
896	Total Light Vehicles
45	Total Heavy Vehicles
3	Total Pedestrians



13/12/2007 - Morisset Park Road / Fishery Pt Rd, Morriset Park

Light Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
08:15	18	0	7	112	29	5	0	0	1	171	
08:30	15	1	2	109	39	8	0	0	0	174	
08:45	25	3	8	124	30	7	0	3	0	197	
09:00	30	5	17	131 <	48	11	0	0 <	0 <	242	784
09:15	32	14	36	78	38	16	0	0 <	0	214	827
09:30	29 <	16	44	82	57	15	0	0 <	0	243	896 <
09:45	17	22 <	10 <	82	39 <	13 <	0	0	0	183	882
10:00	15	1	2	86	48 <	6	0	0	0	158	798

Heavy Vehicles

	1	2	3	4	5	6	Total Vehicles	
							15 MIN	HOURLY
08:15	0	1	0	6	9	2	18	
08:30	0	0	0	11	3	1	15	
08:45	1	0	0	5	6	0	12	
09:00	2	0 <	1	3 <	5 <	2 <	13	58 <
09:15	5	1 <	4 <	3	2	1	16	56
09:30	0	0 <	0 <	2	2	0	4	45
09:45	2 <	0 <	0 <	2	3	0	7	40
10:00	1	0 <	0	3	5	0	9	36

All Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
08:15	18	1	7	118	38	7	0	0	1	189	
08:30	15	1	2	120	42	9	0	0	0	189	
08:45	26	3	8	129	36	7	0	3	0	209	
09:00	32	5	18	134 <	53	13	0	0 <	0 <	255	842
09:15	37	15	40	81	40	17	0	0 <	0	230	883
09:30	29 <	16	44	84	59	15	0	0 <	0	247	941 <
09:45	19	22 <	10 <	84	42 <	13 <	0	0	0	190	922
10:00	16	1	2	89	53 <	6	0	0	0	167	834

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

13/12/2007 - Morisset Park Road / Fishery Pt Rd, Morisset Park

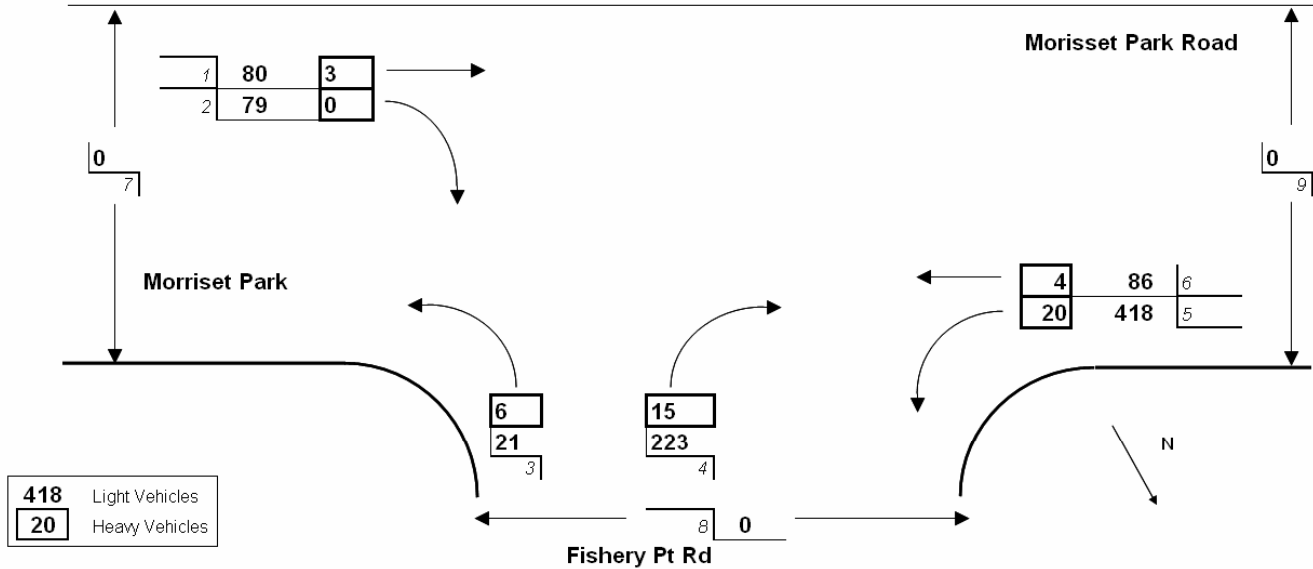
16:15 <<< HOUR ENDING

Thursday

Summary:

Morisset Park Road / Fishery Pt Rd

907 Total Light Vehicles
48 Total Heavy Vehicles
0 Total Pedestrians



13/12/2007 - Morisset Park Road / Fishery Pt Rd, Morisset Park

Light Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
15:15	10	4	1	54	93	14	0	0	0	176	
15:30	10	9	9	48	126	29	0	0	0	231	
15:45	43	57	10	51	80	21	0	0	0	262	
16:00	15	8	1 <	58	110	15	0	0	0	207	876
16:15	12 <	5 <	1 <	66	102	21 <	0	0	0	207	907 <
16:30	4	6	0	45	118	21	0	0	0	194	870
16:45	12	6	1	74 <	99	20	0	0	0	212	820
17:00	15	1	1	43	105	17	0	0	0	182	795
17:15	6	2	0	37	116	22	0	0	0	183	771
17:30	9	1	0	39	124 <	10	0	0	0	183	760

Heavy Vehicles

	1	2	3	4	5	6						Total Vehicles	
							15 MIN	HOURLY					
15:15	0	0	0	3	2	1						6	
15:30	0	0	1	2	8	2						13	
15:45	3	0	4	3	6	1						17	
16:00	0 <	0	1 <	6	3	0 <						10	46
16:15	0 <	0	0 <	4	3	1 <						8	48 <
16:30	0 <	0	0	4 <	9 <	0						13	48 <
16:45	0	0	0	2	1	1						4	35
17:00	0	0	0	4	3	0						7	32
17:15	0	0	0	0	5	1						6	30
17:30	0	0	0	0	3	1						4	21

All Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
15:15	10	4	1	57	95	15	0	0	0	182	
15:30	10	9	10	50	134	31	0	0	0	244	
15:45	46	57	14	54	86	22	0	0	0	279	
16:00	15	8	2 <	64	113	15	0	0	0	217	922
16:15	12 <	5 <	1 <	70	105	22 <	0	0	0	215	955 <
16:30	4	6	0	49	127	21	0	0	0	207	918
16:45	12	6	1	76 <	100	21	0	0	0	216	855
17:00	15	1	1	47	108	17	0	0	0	189	827
17:15	6	2	0	37	121 <	23	0	0	0	189	801
17:30	9	1	0	39	127 <	11	0	0	0	187	781

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

13/12/2007 - Fishery Pt Rd / Baldwin Blvd, Morrisset Park

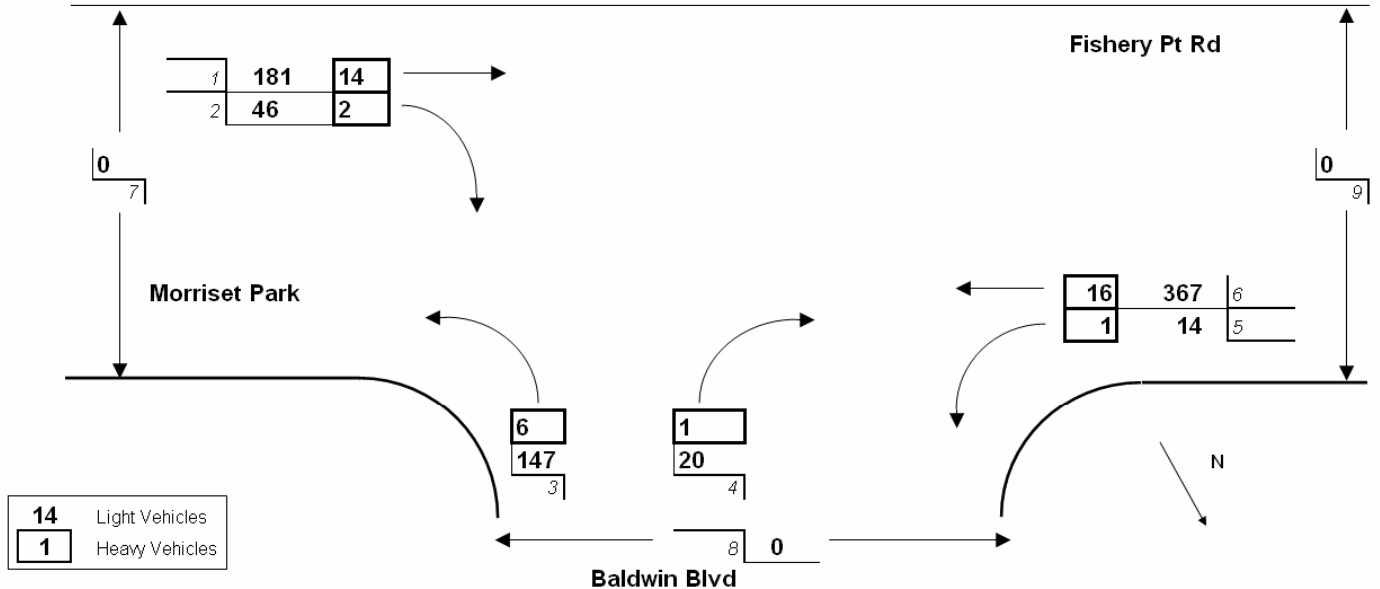
9:30 <<< HOUR ENDING

Thursday

Summary:

Fishery Pt Rd / Baldwin Blvd

775 Total Light Vehicles
40 Total Heavy Vehicles
0 Total Pedestrians



13/12/2007 - Fishery Pt Rd / Baldwin Blvd, Morrisset Park

Light Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
08:15	27	12	33	2	1	98	0	0	0	173	
08:30	35	7	38	2	3	76	0	0	0	161	
08:45	32	11	43	3	2	95	0	0	0	186	
09:00	49	10	32	5	2	116 <	0	0	0	214	734
09:15	37	9	34 <	5	7	75	0	0	0	167	728
09:30	63	16	38 <	7	3	81	0	0	0	208	775 <
09:45	54	8	24	4 <	11	59	0	0	0	160	749
10:00	51 <	17 <	28	4	5 <	71	0	0	0	176	711

Heavy Vehicles

	1	2	3	4	5	6			Total Vehicles	
							15 MIN	HOURLY		
08:15	10	0	1	0	0	7			18	
08:30	3	0	1	1	1	8			14	
08:45	6	0	2	0	0	5			13	
09:00	4 <	1	2	0	0 <	7 <			14	59 <
09:15	2	1 <	2 <	1 <	0 <	3 <			9	50
09:30	2	0 <	0	0	1 <	1			4	40
09:45	3	0 <	0	0	0 <	3			6	33
10:00	5	1 <	0	0	0 <	4			10	29

All Vehicles

	1	2	3	4	5	6	7	8	9	Total Vehicles	
										15 MIN	HOURLY
08:15	37	12	34	2	1	105	0	0	0	191	
08:30	38	7	39	3	4	84	0	0	0	175	
08:45	38	11	45	3	2	100	0	0	0	199	
09:00	53	11	34	5	2	123 <	0	0	0	228	793
09:15	39	10	36 <	6	7	78	0	0	0	176	778
09:30	65	16	38	7	4	82	0	0	0	212	815 <
09:45	57	8	24	4 <	11	62	0	0	0	166	782
10:00	56 <	18 <	28	4	5 <	75	0	0	0	186	740

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



1/5/2008 - Morissett Park Rd / Chifley Rd

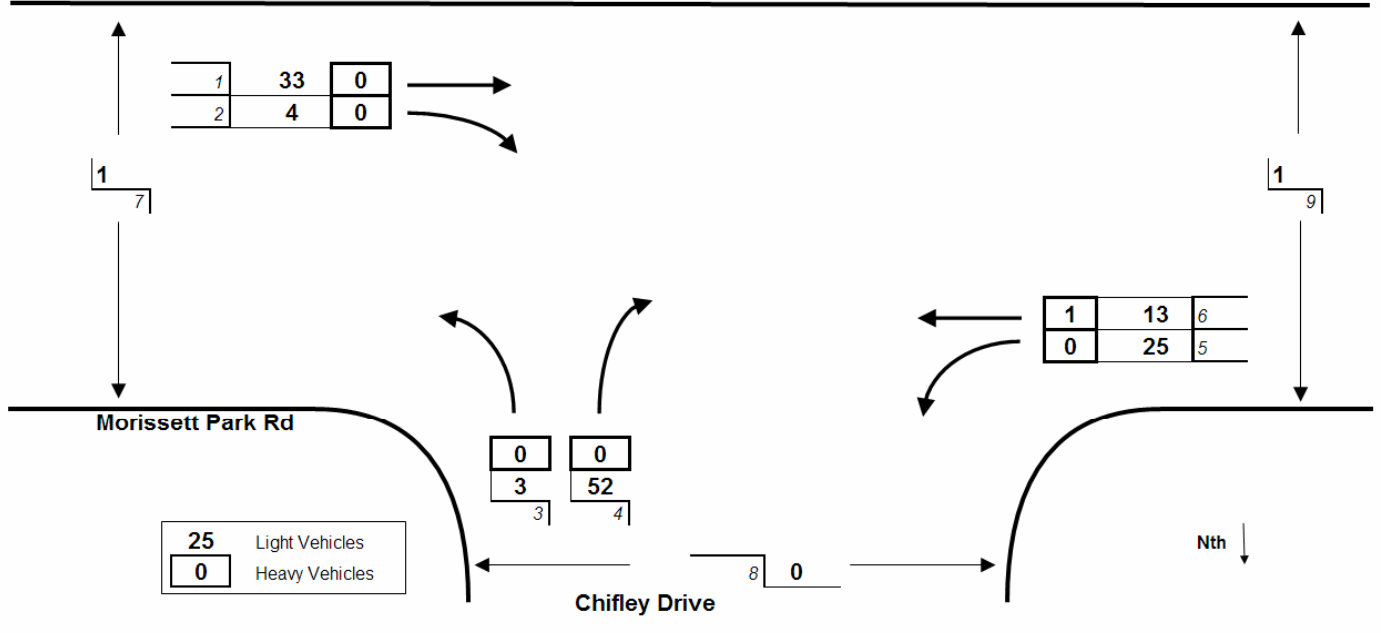
9:30 <<< HOUR ENDING

Thursday

Summary:

Morissett Park Rd / Chifley Rd

130 Total Light Vehicles
 1 Total Heavy Vehicles
 2 Total Pedestrians



1/5/2008 - Morissett Park Rd / Chifley Rd

Light Vehicles

	Light Vehicles						Total Vehicles 15 MIN HOUR	Pedestrians		
	1	2	3	4	5	6		7	8	9
07:45	7	0	1	10	2	3	23	1	0	0
08:00	7	0	1	13	1	3	25	0	0	0
08:15	8	0	0	13	1	1	23	0	0	0
08:30	11	1	0	11	0	3	26	97	0	0
08:45	8	1	0	11	1	2	23	97	0	0
09:00	11 <	1	1	16	5	4	38	110	0	0
09:15	6	1 <	1	15 <	10	3	36	123	0	0
09:30	8	1 <	1 <	10	9 <	4 <	33	130 <	1	0

Heavy Vehicles

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

All Vehicles

	All Vehicles						Total Vehicles 15 MIN HOUR	Pedestrians		
	1	2	3	4	5	6		7	8	9
07:45	7	0	1	11	2	3	24			
08:00	8	0	1	13	1	4	27			
08:15	8	0	0	13	1	2	24			
08:30	11	1	0	11	0	4	27	102		
08:45	8	1	0	11	1	2	23	101		
09:00	11 <	1	1	16	5	4	38	112		
09:15	6	1 <	1	15 <	10	4 <	37	125		
09:30	8	1 <	1 <	10	9 <	4 <	33	131 <		

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



30/4/2008 - Morissett Park Rd / Chifley Rd

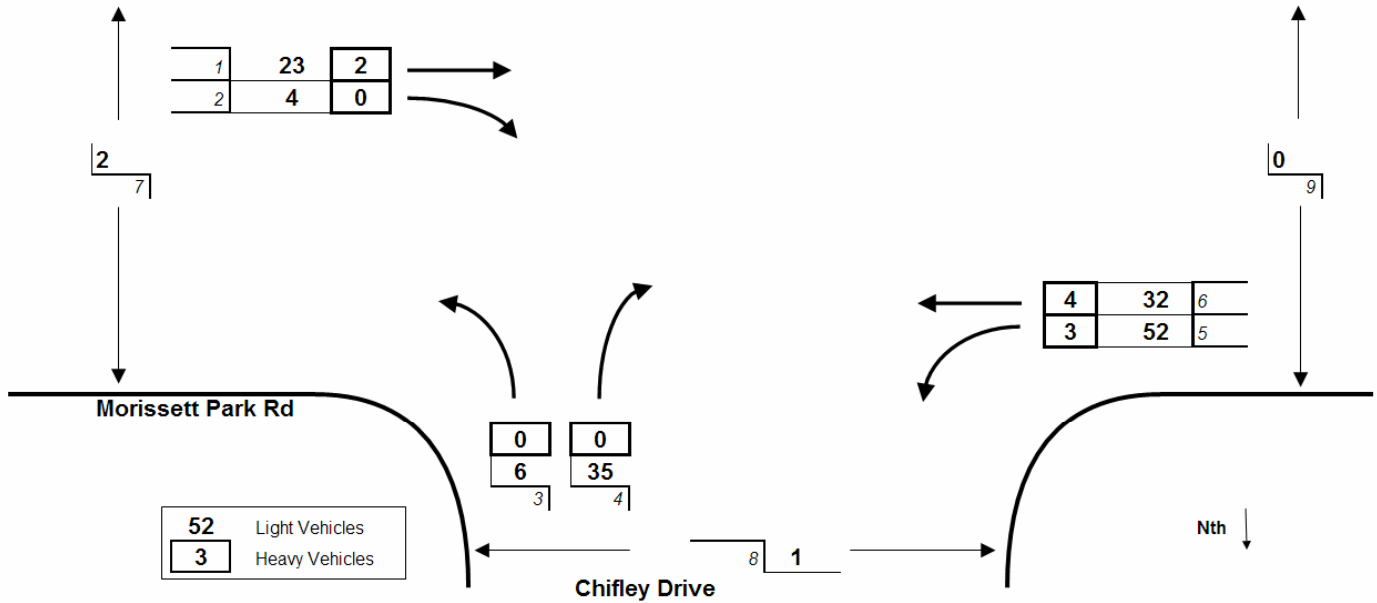
16:00 <<< HOUR ENDING

Wednesday

Summary:

Morissett Park Rd / Chifley Rd

152 Total Light Vehicles
 9 Total Heavy Vehicles
 3 Total Pedestrians



30/4/2008 - Morissett Park Rd / Chifley Rd

Light Vehicles

	Light Vehicles						Total Vehicles 15 MIN HOUR	Pedestrians			
	1	2	3	4	5	6		7	8	9	
15:15	6	0	0	18	12	4	40	0	0	0	
15:30	6	2	0	8	8	8	32	0	0	0	
15:45	5	0	2	5	21	12	45	1	0	0	
16:00	6 <	2	4	4 <	11	8	35	152 <	1	1	0
16:15	5	3	1	6	13	10	38	150	2	0	0
16:30	6	0	1	5	9 <	12 <	33	151	0	0	0
16:45	5	4 <	5 <	6	13	4	37	143	1	0	0
17:00	4	2 <	0	2	7	12	27	135	0	0	0

Heavy Vehicles

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

All Vehicles

	All Vehicles						Total Vehicles 15 MIN HOUR	Pedestrians		
	1	2	3	4	5	6		7	8	9
15:15	7	0	0	18	12	4	41			
15:30	6	2	0	8	8	9	33			
15:45	6	0	2	5	21	13	47			
16:00	6 <	2	4	4 <	14	10	40	161 <		
16:15	5	3	1	6	14	11	40	160		
16:30	6	0	1	5	9 <	12 <	33	160		
16:45	5	4 <	5 <	6	13	6	39	152		
17:00	4	2 <	0	2	7	12	27	139		
17:15	0	0	0	0	0	0	0	99		
17:30	0	0	0	0	0	0	0	66		

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

Appendix B

Automatic Vehicle Counts

Fishery Point Road

Morisset Park Road

Victoria Street

Baldwin Boulevard

		2004 Eastbound												
Day Time	6		7		1		2		3		4		5	
	Fri 6-Feb	Sat 7-Feb	Sun 8-Feb	Mon 9-Feb	Tue 10-Feb	Wed 11-Feb	Thu 12-Feb	W/Day Ave.	7 Day Ave					
0:00	49	53	77	24	31	30	32	33	42					
1:00	12	41	35	9	11	12	15	12	19					
2:00	5	21	12	3	6	7	7	6	9					
3:00	4	10	15	6	6	6	6	6	8					
4:00	5	9	8	13	7	10	11	9	9					
5:00	28	21	15	21	20	19	19	21	20					
6:00	99	40	41	89	87	84	78	87	74					
7:00	162	90	75	162	141	180	140	157	136					
8:00	221	186	140	201	218	223	256	224	206					
9:00	305	335	296	262	258	337	266	286	294					
10:00	279	384	272	263	269	272	269	270	287					
11:00	315	432	408	287	301	268	284	291	328					
12:00	350	463	349	310	315	301	308	317	342					
13:00	390	391	265	310	317	277	308	320	323					
14:00	421	316	281	305	312	284	333	331	322					
15:00	537	318	308	478	521	513	500	510	454					
16:00	581	332	342	527	535	509	568	544	485					
17:00	543	326	276	533	545	560	582	553	481					
18:00	426	313	232	442	421	451	401	428	384					
19:00	254	215	213	204	236	273	245	242	234					
20:00	224	152	144	210	184	206	213	207	190					
21:00	182	134	79	132	182	135	158	158	143					
22:00	132	126	61	78	94	89	94	97	96					
23:00	79	108	56	47	41	53	54	55	63					
Total	5603	4816	4000	4916	5058	5099	5147	5165	4948					

Average Week Day				
Volume	from	to		
	AM Peak	11:00 AM	12:00 PM	432
	PM Peak	5:00 PM	6:00 PM	582
	Week Day Average		5165	
	Weekend Day Average		4408	
	7 Day Average		4948	

Fishery Point Road, Morisset Park		2004 Westbound							
Day Time	6	7	1	2	3	4	5	W/Day Ave.	7 Day Ave
	Fri 6-Feb	Sat 7-Feb	Sun 8-Feb	Mon 9-Feb	Tue 10-Feb	Wed 11-Feb	Thu 12-Feb		
0:00	19	27	27	10	11	6	12	12	16
1:00	11	15	33	10	8	7	11	9	14
2:00	11	16	12	5	6	8	11	8	10
3:00	23	7	10	20	13	11	13	16	14
4:00	37	25	14	48	51	45	44	45	38
5:00	175	55	41	172	165	176	183	174	138
6:00	283	129	77	295	324	324	324	310	251
7:00	423	181	101	495	486	489	490	477	381
8:00	503	391	245	515	536	524	530	522	463
9:00	500	486	405	436	414	434	469	451	449
10:00	368	485	328	310	319	346	307	330	352
11:00	322	407	347	268	262	290	293	291	316
12:00	280	299	324	250	268	232	244	255	271
13:00	328	256	284	269	274	269	276	283	279
14:00	343	252	259	305	322	305	324	320	301
15:00	343	237	277	341	297	313	361	331	310
16:00	335	276	335	292	336	324	326	323	318
17:00	265	350	239	228	275	219	238	245	259
18:00	282	269	246	216	241	237	226	240	245
19:00	209	183	120	160	179	155	153	171	166
20:00	162	142	98	99	109	119	104	119	119
21:00	100	101	85	73	59	77	70	76	81
22:00	61	89	71	40	53	47	54	51	59
23:00	43	61	10	14	18	22	12	22	26
Total	5426	4739	3988	4871	5046	4979	5075	5079	4875

Average Week Day			
Volume	Time	from	to
600	0:00		
500	2:00		
400	4:00		
300	6:00		
200	8:00		
100	10:00		
0	12:00		
	14:00		
	16:00		
	18:00		
	20:00		
	22:00		

Summary			
	from	to	
AM Peak	8:00 AM	9:00 AM	536
PM Peak	3:00 PM	4:00 PM	361
Week Day Average			5079
Weekend Day Average			4364
7 Day Average			4875

Morisset Park Road, Morisset Park										2004 Eastbound	
Day	4	5	6	7	1	2	3	W/Day	7 Day		
Time	Wed 3-Mar	Thu 4-Mar	Fri 5-Mar	Sat 6-Mar	Sun 7-Mar	Mon 8-Mar	Tue 9-Mar	Ave.	Ave.		
0:00		4	5	6				5	5		
1:00		2	3	6				3	4		
2:00		1	0	2				1	1		
3:00		1	3	1				2	2		
4:00		1	1	2				1	1		
5:00		6	4	4				5	5		
6:00		41	34	17				38	31		
7:00		46	26	10				36	27		
8:00		35	31	17				33	28		
9:00		87	38	42				63	56		
10:00		46	53	60				50	53		
11:00		49	44					47	47		
12:00		45	67					56	56		
13:00		43	56					50	50		
14:00		66	69					68	68		
15:00	102	106	71					93	93		
16:00	107	77	76					87	87		
17:00	79	95	83					86	86		
18:00	61	52	55					56	56		
19:00	45	36	39					40	40		
20:00	29	27	37					31	31		
21:00	12	28	20					20	20		
22:00	22	18	25					22	22		
23:00	10	14	13					12	12		
Total	467	926	853	167				900	878		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
0	4:00	0	6:00
35	6:00	35	8:00
45	8:00	45	10:00
45	10:00	45	12:00
55	12:00	55	14:00
60	14:00	60	16:00
90	16:00	90	18:00
85	18:00	85	20:00
40	20:00	40	22:00
20	22:00	20	24:00

Summary			
	from	to	
AM Peak	9:00 AM	10:00 AM	87
PM Peak	4:00 PM	5:00 PM	107
Week Day Average			900
Weekend Day Average			822
7 Day Average			878

Morisset Park Road, Morisset Park										2007 Eastbound	
Day	4	5	6	7	1	2	3	W/Day	7 Day		
Time	Wed 12-Dec	Thu 13-Dec	Fri 14-Dec	Sat 15-Dec	Sun 16-Dec	Mon 17-Dec	Tue 18-Dec	Ave.	Ave.		
0:00	5	6	2	5	11	1	6	4	5		
1:00	3	1	1	3	4	0	1	1	2		
2:00	2	1	2	1	3	1	0	1	1		
3:00	2	1	1	1	2	0	1	1	1		
4:00	1	0	2	2	2	0	1	1	1		
5:00	6	2	3	4	2	2	3	3	3		
6:00	25	24	17	10	2	22	19	21	17		
7:00	22	24	29	20	8	25	19	24	21		
8:00	26	16	24	11	15	32	19	23	20		
9:00	55	46	55	42	31	39	38	47	44		
10:00	37	48	34	48	43	41	42	40	42		
11:00	30	40	38	47	50	48	38	39	42		
12:00	36	38	55	68	56	43	36	42	47		
13:00	36	49	47	51	39	42	37	42	43		
14:00	54	49	51	48	45	47	51	50	49		
15:00	85	86	72	56	46	80	62	77	70		
16:00	81	83	78	55	52	61	72	75	69		
17:00	86	58	70	59	40	73	78	73	66		
18:00	61	49	60	38	52	60	57	57	54		
19:00	26	32	44	29	32	41	35	36	34		
20:00	34	29	26	19	7	32	28	30	25		
21:00	31	30	35	35	16	36	33	33	31		
22:00	25	27	16	16	10	16	18	20	18		
23:00	10	10	13	22	9	7	7	9	11		
Total	779	749	775	690	577	749	701	751	717		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
0	4:00	0	6:00
20	6:00	20	8:00
45	8:00	45	10:00
45	10:00	45	12:00
55	12:00	55	14:00
75	14:00	75	16:00
85	16:00	85	18:00
75	18:00	75	20:00
35	20:00	35	22:00
15	22:00	15	24:00

Summary			
	from	to	
AM Peak	9:00 AM	10:00 AM	55
PM Peak	3:00 PM	4:00 PM	86
Week Day Average			751
Weekend Day Average			634
7 Day Average			717

Morisset Park Road, Morisset Park										2004 Westbound	
Day	4	5	6	7	1	2	3	W/Day	7 Day		
Time	Wed 3-Mar	Thu 4-Mar	Fri 5-Mar	Sat 6-Mar	Sun 7-Mar	Mon 8-Mar	Tue 9-Mar	Ave.	Ave.		
0:00		0	3	1				2	1		
1:00		1	3	1				2	2		
2:00		0	0	0				0	0		
3:00		2	3	2				3	2		
4:00		7	8	3				8	6		
5:00		17	16	5				17	13		
6:00		53	43	22				48	39		
7:00		80	64	34				72	59		
8:00		75	70	50				73	65		
9:00		89	71	70				80	77		
10:00		51	64	76				58	64		
11:00		40	47					44	44		
12:00		47	59					53	53		
13:00		56	42					49	49		
14:00		45	55					50	50		
15:00	95	110	78					94	94		
16:00	56	56	78					63	63		
17:00	59	53	49					54	54		
18:00	39	38	39					39	39		
19:00	33	33	52					39	39		
20:00	12	13	20					15	15		
21:00	14	9	14					12	12		
22:00	10	9	8					9	9		
23:00	14	11	12					12	12		
Total	332	895	898	264				894	862		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
10	4:00	10	6:00
70	6:00	70	8:00
80	8:00	80	10:00
50	10:00	50	12:00
45	12:00	45	14:00
50	14:00	50	16:00
90	16:00	90	18:00
40	18:00	40	20:00
10	20:00	10	22:00
0	22:00	0	24:00

Summary			
	from	to	
AM Peak	9:00 AM	10:00 AM	89
PM Peak	3:00 PM	4:00 PM	110
Week Day Average			894
Weekend Day Average			782
7 Day Average			862

Morisset Park Road, Morisset Park										2007 Westbound	
Day	4	5	6	7	1	2	3	W/Day	7 Day		
Time	Wed 12-Dec	Thu 13-Dec	Fri 14-Dec	Sat 15-Dec	Sun 16-Dec	Mon 17-Dec	Tue 18-Dec	Ave.	Ave.		
0:00	0	2	0	2	6	0	0	0	1		
1:00	2	1	0	1	2	0	0	1	1		
2:00	1	0	1	2	2	0	0	0	1		
3:00	1	3	0	2	1	2	1	1	1		
4:00	9	4	7	2	1	8	6	7	5		
5:00	21	14	17	6	4	18	25	19	15		
6:00	43	59	45	20	8	45	48	48	38		
7:00	65	61	63	43	17	84	59	66	56		
8:00	83	77	79	46	31	70	82	78	67		
9:00	53	62	63	65	54	72	58	62	61		
10:00	41	58	35	66	53	38	39	42	47		
11:00	57	45	40	39	57	46	31	44	45		
12:00	34	31	54	37	39	34	52	41	40		
13:00	50	34	45	37	37	34	40	41	40		
14:00	48	52	48	45	58	51	63	52	52		
15:00	45	48	56	39	21	44	45	48	43		
16:00	36	32	44	49	39	43	43	40	41		
17:00	21	34	31	42	35	35	35	31	33		
18:00	40	33	41	48	29	31	31	35	36		
19:00	24	18	24	22	22	30	17	23	22		
20:00	19	9	11	13	12	14	15	14	13		
21:00	11	11	18	16	7	9	8	11	11		
22:00	14	6	8	9	5	3	7	8	7		
23:00	0	2	3	2	6	0	3	2	2		
Total	718	696	733	653	546	711	708	713	681		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
10	4:00	10	6:00
70	6:00	70	8:00
40	8:00	40	10:00
45	10:00	45	12:00
50	12:00	50	14:00
30	14:00	30	16:00
40	16:00	40	18:00
10	18:00	10	20:00
0	20:00	0	22:00
0	22:00	0	24:00

Summary			
	from	to	
AM Peak	7:00 AM	8:00 AM	84
PM Peak	2:00 PM	3:00 PM	63
Week Day Average			713
Weekend Day Average			600
7 Day Average			681

		Victoria Street, Morisset Park							2004 Southbound	
Day	Time	Fri 6-Feb	Sat 7-Feb	Sun 8-Feb	Mon 9-Feb	Tue 10-Feb	Wed 11-Feb	Thu 12-Feb	W/Day Ave.	7 Day Ave
0:00		5	0	4	0	1	1	3	2	2
1:00		1	8	1	1	0	3	0	1	2
2:00		1	1	0	0	0	0	1	0	0
3:00		0	2	4	0	0	0	0	0	1
4:00		1	0	3	0	0	1	1	1	1
5:00		1	1	3	5	1	0	1	2	2
6:00		11	8	8	10	7	10	8	9	9
7:00		24	11	6	14	18	11	22	18	15
8:00		27	22	19	19	16	25	22	22	21
9:00		37	34	25	29	35	31	25	31	31
10:00		26	39	41	32	24	26	23	26	30
11:00		25	39	43	33	25	26	24	27	31
12:00		28	46	37	27	30	28	19	26	31
13:00		31	28	27	29	37	33	30	32	31
14:00		23	31	37	30	25	24	27	26	28
15:00		39	31	40	53	35	23	37	37	37
16:00		43	43	39	37	38	36	45	40	40
17:00		48	40	40	48	39	36	52	45	43
18:00		40	44	30	52	33	35	15	35	36
19:00		27	30	27	25	42	41	21	31	30
20:00		29	18	12	11	15	16	21	18	17
21:00		13	11	5	7	14	8	2	9	9
22:00		19	7	3	1	3	5	2	6	6
23:00		7	8	3	1	0	3	3	3	4
Total		506	502	457	464	438	422	404	447	456

Average Week Day	
0:00	0
2:00	0
4:00	0
6:00	5
8:00	20
10:00	30
12:00	25
14:00	30
16:00	35
18:00	45
20:00	30
22:00	10
23:00	5

Summary			
	from	to	
AM Peak	11:00 AM	12:00 PM	43
PM Peak	3:00 PM	4:00 PM	53
Week Day Average			447
Weekend Day Average			480
7 Day Average			456

		Victoria Street, Morisset Park					2007 Southbound			
Day	Time	Wed 12-Dec	Thu 13-Dec	Fri 14-Dec	Sat 15-Dec	Sun 16-Dec	Mon 17-Dec	Tue 18-Dec	W/Day Ave.	7 Day Ave
0:00		0	1	1	3	8	2	2	1	2
1:00		0	0	1	1	5	1	1	1	1
2:00		0	0	1	1	2	0	0	0	1
3:00		0	1	0	0	2	0	0	0	0
4:00		0	0	0	3	1	0	1	0	1
5:00		3	2	2	2	0	4	4	3	2
6:00		8	11	9	6	6	12	5	9	8
7:00		18	13	12	14	6	14	15	14	13
8:00		21	19	18	13	19	13	19	18	17
9:00		28	32	23	18	30	22	28	27	26
10:00		16	17	25	32	30	22	19	20	23
11:00		21	19	22	29	31	18	17	19	22
12:00		16	21	30	28	32	30	35	26	27
13:00		20	27	24	24	19	24	18	23	22
14:00		23	33	28	35	28	20	18	24	26
15:00		28	30	40	27	17	32	48	36	32
16:00		29	37	27	20	30	46	43	36	33
17:00		35	28	31	40	26	41	32	33	33
18:00		30	24	30	31	19	28	28	28	27
19:00		23	24	23	18	27	24	20	23	23
20:00		12	17	14	16	20	24	24	18	18
21:00		12	7	21	17	7	19	7	13	13
22:00		7	15	16	10	5	5	7	10	9
23:00		0	2	4	7	2	2	6	3	3
Total		350	380	402	395	372	403	397	386	386

Average Week Day	
0:00	0
2:00	0
4:00	0
6:00	5
8:00	15
10:00	25
12:00	20
14:00	25
16:00	35
18:00	35
20:00	20
22:00	10
23:00	5

Summary			
	from	to	
AM Peak	9:00 AM	10:00 AM	32
PM Peak	3:00 PM	4:00 PM	48
Week Day Average			386
Weekend Day Average			384
7 Day Average			386

Victoria Street, Morisset Park									
2004 Northbound									
Day	6	7	1	2	3	4	5	W/Day	7 Day
Time	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb	11-Feb	12-Feb	Ave.	Ave.
0:00	6	1	11	1	3	0	4	3	4
1:00	0	5	2	1	2	1	0	1	2
2:00	0	1	1	0	0	0	0	0	0
3:00	0	0	4	0	0	0	0	0	1
4:00	0	2	1	0	0	1	1	0	1
5:00	4	3	3	1	2	1	1	2	2
6:00	10	4	6	14	8	10	8	10	9
7:00	24	16	8	16	15	14	17	17	16
8:00	26	29	32	24	22	30	21	25	26
9:00	51	32	29	46	47	38	37	44	40
10:00	24	44	44	27	18	35	24	26	31
11:00	29	53	42	21	24	24	25	25	31
12:00	26	33	46	30	26	21	23	25	29
13:00	35	43	30	38	25	22	28	30	32
14:00	34	30	39	30	26	15	35	28	30
15:00	47	27	39	63	53	55	56	55	49
16:00	42	48	41	46	56	58	55	51	49
17:00	48	40	40	54	44	45	33	45	43
18:00	37	57	34	31	33	33	25	32	36
19:00	32	28	21	34	39	30	26	32	30
20:00	19	12	14	13	13	12	17	15	14
21:00	12	9	10	8	9	15	9	11	10
22:00	12	14	4	5	1	4	6	6	7
23:00	13	14	3	1	4	7	3	6	6
Total	531	545	504	504	470	471	454	486	497

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
0	4:00	0	6:00
10	6:00	20	8:00
40	8:00	45	10:00
25	10:00	25	12:00
25	12:00	25	14:00
55	14:00	55	16:00
45	16:00	35	18:00
15	18:00	10	20:00
5	20:00	5	22:00
5	22:00	5	24:00

Summary			
from	to	Volume	
AM Peak	11:00 AM to 12:00 PM	53	
PM Peak	3:00 PM to 4:00 PM	63	
Week Day Average		486	
Weekend Day Average		525	
7 Day Average		497	

Victoria Street, Morisset Park									
2007 Northbound									
Day	4	5	6	7	1	2	3	W/Day	7 Day
Time	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	Ave.	Ave.
0:00	0	1	1	4	4	0	0	0	1
1:00	2	0	1	1	2	1	0	1	1
2:00	0	0	0	0	1	0	0	0	0
3:00	0	0	0	1	4	0	0	0	1
4:00	0	0	0	1	2	0	0	0	0
5:00	3	4	5	2	3	4	7	5	4
6:00	14	8	8	10	4	13	13	11	10
7:00	19	14	16	16	8	12	17	16	15
8:00	27	22	19	20	20	18	24	22	21
9:00	41	34	41	25	31	35	37	38	35
10:00	18	30	27	27	22	26	19	24	24
11:00	24	15	23	19	30	17	15	19	20
12:00	15	18	29	19	26	30	24	23	23
13:00	13	23	16	24	25	19	22	19	20
14:00	15	23	22	39	31	23	24	21	25
15:00	33	49	35	26	26	34	33	37	34
16:00	29	35	28	30	35	35	29	31	32
17:00	28	25	37	31	21	39	28	31	30
18:00	27	32	23	43	19	29	27	28	29
19:00	20	23	18	14	18	29	22	22	21
20:00	14	10	13	17	11	17	20	15	15
21:00	13	12	23	11	11	26	8	16	15
22:00	5	6	10	10	4	2	6	6	6
23:00	6	2	2	6	5	6	1	3	4
Total	366	386	397	396	363	415	376	388	386

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	2:00
0	2:00	0	4:00
0	4:00	0	6:00
10	6:00	20	8:00
35	8:00	35	10:00
20	10:00	20	12:00
20	12:00	20	14:00
35	14:00	35	16:00
25	16:00	15	18:00
10	18:00	5	20:00
5	20:00	5	22:00
5	22:00	5	24:00

Summary			
from	to	Volume	
AM Peak	9:00 AM to 10:00 AM	41	
PM Peak	3:00 PM to 4:00 PM	49	
Week Day Average		388	
Weekend Day Average		350	
7 Day Average		386	



Baldwin Boulevard, Morisset Park										2004 Eastbound	
Day Time	7	1	2	3	4	5	6	W/Day Ave.	7 Day Ave		
	Sat 7-Feb	Sun 8-Feb	Mon 9-Feb	Tue 10-Feb	Wed 11-Feb	Thu 12-Feb	Fri 13-Feb				
0:00	9	20	5	10	10	9	19	11	12		
1:00	16	14	4	4	6	1	10	5	8		
2:00	4	4	0	2	3	4	4	3	3		
3:00	6	7	0	2	2	0	0	1	2		
4:00	6	3	3	1	1	3	4	2	3		
5:00	2	2	4	5	2	5	4	4	3		
6:00	10	8	13	18	25	19	17	18	16		
7:00	33	28	42	33	32	35	34	35	34		
8:00	50	39	39	43	45	46	42	43	43		
9:00	81	62	82	65	88	66	53	71	71		
10:00	103	76	74	64	61	64	66	66	73		
11:00	112	110	83	55	82	71	82	75	85		
12:00	139	103	80	96	69	67	92	81	92		
13:00	104	92	75	80	76	93	81	81	86		
14:00	92	83	80	80	70	73	95	80	82		
15:00	103	94	149	136	103	122	122	126	118		
16:00	109	117	160	150	128	132	143	143	134		
17:00	97	93	162	162	130	158	148	152	136		
18:00	101	77	137	125	100	102	119	117	109		
19:00	75	76	79	96	90	72	86	85	82		
20:00	55	47	61	62	64	65	78	66	62		
21:00	40	26	39	42	44	36	50	42	40		
22:00	42	11	32	23	25	31	41	30	29		
23:00	26	9	11	13	19	12	19	15	16		
Total	1415	1201	1414	1367	1275	1286	1409	1350	1338		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	10	18:00
10	2:00	20	19:00
20	4:00	30	20:00
30	6:00	40	21:00
40	8:00	50	22:00
50	10:00	60	23:00
60	12:00	70	
70	14:00	80	
80	16:00	90	
90	18:00	100	
100	20:00	110	
110	22:00	120	
120	23:00	130	

Summary			
from	to	Volume	
AM Peak	11:00 AM - 12:00 PM	112	
PM Peak	5:00 PM - 6:00 PM	162	
Week Day Average		1350	
Weekend Day Average		1308	
7 Day Average		1338	

Baldwin Boulevard, Morisset Park										2007 Eastbound	
Day Time	4	5	6	7	1	2	3	W/Day Ave.	7 Day Ave		
	Wed 12-Dec	Thu 13-Dec	Fri 14-Dec	Sat 15-Dec	Sun 16-Dec	Mon 17-Dec	Tue 18-Dec				
0:00	8	11	8	21	28	3	14	9	13		
1:00	5	3	6	6	17	3	2	4	6		
2:00	7	1	1	6	9	0	2	2	4		
3:00	1	1	2	5	5	1	0	1	2		
4:00	4	3	4	9	2	1	5	3	4		
5:00	10	6	4	2	2	10	11	8	6		
6:00	13	15	16	19	13	16	11	14	15		
7:00	32	35	24	30	20	33	24	30	28		
8:00	54	49	47	39	45	40	57	49	47		
9:00	73	69	52	60	66	56	66	63	63		
10:00	73	56	63	84	105	78	70	68	76		
11:00	81	63	80	109	96	75	80	76	83		
12:00	54	80	90	112	99	91	83	80	87		
13:00	84	83	89	106	93	90	89	87	91		
14:00	89	114	97	99	98	92	88	96	97		
15:00	152	126	142	121	83	132	148	140	129		
16:00	139	149	143	118	104	152	164	149	138		
17:00	149	122	145	122	98	179	177	154	142		
18:00	125	118	113	100	100	115	138	122	116		
19:00	102	89	90	83	88	74	85	88	87		
20:00	56	80	85	65	49	74	92	77	72		
21:00	58	63	63	62	35	51	42	55	53		
22:00	38	48	45	41	19	29	28	38	35		
23:00	13	22	40	33	15	11	16	20	21		
Total	1420	1406	1449	1452	1289	1406	1492	1435	1416		

Average Week Day			
Volume	Time	Volume	Time
0	0:00	10	18:00
10	2:00	20	19:00
20	4:00	30	20:00
30	6:00	40	21:00
40	8:00	50	22:00
50	10:00	60	23:00
60	12:00	70	
70	14:00	80	
80	16:00	90	
90	18:00	100	
100	20:00	110	
110	22:00	120	
120	23:00	130	

Summary			
from	to	Volume	
AM Peak	11:00 AM - 12:00 PM	109	
PM Peak	5:00 PM - 6:00 PM	179	
Week Day Average		1435	
Weekend Day Average		1371	
7 Day Average		1416	

Baldwin Boulevard, Morisset Park									
2004 Westbound									
Day	7	1	2	3	4	5	6	W/Day	7 Day
Time	7-Feb	8-Feb	9-Feb	10-Feb	11-Feb	12-Feb	13-Feb	Ave.	Ave.
0:00	4	8	4	7	2	6	7	5	5
1:00	4	10	2	0	1	1	12	3	4
2:00	5	3	1	3	2	3	3	2	3
3:00	4	6	6	6	3	4	4	5	5
4:00	5	7	8	10	9	5	10	8	8
5:00	19	14	38	49	44	52	48	46	38
6:00	47	32	82	91	93	98	82	89	75
7:00	57	25	137	118	133	110	127	125	101
8:00	118	88	147	150	150	137	125	142	131
9:00	156	112	122	125	126	123	124	124	127
10:00	159	113	92	93	76	68	90	84	99
11:00	139	113	73	66	89	85	89	80	93
12:00	95	118	78	88	73	59	85	77	85
13:00	94	85	92	84	75	93	81	85	86
14:00	83	88	88	85	68	90	103	87	86
15:00	86	93	110	100	102	93	97	100	97
16:00	94	87	110	109	102	110	116	109	104
17:00	100	102	88	84	74	86	107	88	92
18:00	112	73	91	86	87	74	101	88	89
19:00	83	46	67	75	64	60	71	67	67
20:00	55	39	46	34	39	28	46	39	41
21:00	33	17	17	29	33	29	35	29	28
22:00	26	12	11	6	14	19	17	13	15
23:00	12	5	5	6	8	3	19	8	8
Total	1590	1296	1515	1504	1467	1436	1599	1504	1487

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	22:00
20	2:00	20	20:00
40	4:00	40	18:00
60	6:00	60	16:00
80	8:00	80	14:00
100	10:00	100	12:00
120	12:00	120	10:00
140	14:00	140	8:00
160	16:00	160	6:00

Summary			
from	to	Volume	
AM Peak	10:00 AM - 11:00 AM	159	
PM Peak	4:00 PM - 5:00 PM	116	
Week Day Average		1504	
Weekend Day Average		1443	
7 Day Average		1487	

Baldwin Boulevard, Morisset Park									
2007 Westbound									
Day	4	5	6	7	1	2	3	W/Day	7 Day
Time	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	Ave.	Ave.
0:00	6	3	5	12	16	1	4	4	7
1:00	4	3	3	4	7	3	2	3	4
2:00	6	0	0	1	4	0	2	2	2
3:00	1	3	3	3	3	4	0	2	2
4:00	12	18	13	7	8	10	14	13	12
5:00	68	65	56	28	22	50	60	60	50
6:00	118	110	111	60	27	109	119	113	93
7:00	127	130	104	92	52	132	122	123	108
8:00	164	160	175	110	100	153	180	166	149
9:00	165	138	147	161	133	138	142	146	146
10:00	110	122	91	130	127	117	96	107	113
11:00	117	90	104	107	120	93	92	99	103
12:00	80	85	86	90	93	75	76	80	84
13:00	63	75	82	98	100	91	87	80	85
14:00	78	93	91	103	84	105	91	92	92
15:00	88	98	105	98	96	101	103	99	99
16:00	85	102	96	109	107	86	103	94	98
17:00	101	89	110	114	83	112	86	100	99
18:00	125	106	114	109	89	89	111	109	106
19:00	60	57	73	78	44	63	70	65	64
20:00	41	40	52	53	35	43	55	46	46
21:00	33	28	44	41	33	36	34	35	36
22:00	13	13	20	30	12	19	14	16	17
23:00	8	3	13	23	5	11	10	9	10
Total	1673	1631	1698	1661	1400	1641	1673	1663	1625

Average Week Day			
Volume	Time	Volume	Time
0	0:00	0	22:00
20	2:00	20	20:00
40	4:00	40	18:00
60	6:00	60	16:00
80	8:00	80	14:00
100	10:00	100	12:00
120	12:00	120	10:00
140	14:00	140	8:00
160	16:00	160	6:00

Summary			
from	to	Volume	
AM Peak	8:00 AM - 9:00 AM	180	
PM Peak	6:00 PM - 7:00 PM	125	
Week Day Average		1663	
Weekend Day Average		1531	
7 Day Average		1625	