



ROADS AND MARITIME SERVICES

TRIP GENERATION SURVEYS

SERVICE STATIONS

DATA REPORT



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1 INTRODUCTION

1.1 Study purpose

The former Roads and Traffic Authority (RTA) published its Guide to Traffic Generating Developments (“Guide”) in the mid-1990s. This document drew on the results of a number of trip generation and parking demand surveys covering a wide range of business and land uses. These surveys had been progressively conducted since 1978. The trip generation and parking requirement data in the Guide is becoming increasingly out-of-date. Several new business types are not adequately represented and there is evidence of ongoing industry rationalisation (eg larger service stations, hardware supercentres, etc). There is an increasing awareness that public transport has not been adequately accounted for in previous trip and parking generation survey.

TEF Consulting was appointed to undertake a detailed trip generation analysis of service stations. The study includes surveys of traffic characteristics relating to vehicle and person trips at 10 service stations.

1.2 Data collection

The present report provides the base data collected in the course of the study. It includes detailed information about each survey site and the results of the trip generation and parking demand surveys. The specific survey site information and associated survey data can be used by practitioners who wish to make direct comparisons with similar sites.

Trip generation for the survey sites was collected using manual classification counts between 6.00 am and 7:00 pm on weekdays (one day per site). Observers were located on the survey sites (refer to the maps of the survey sites). All trip generation and parking demand counts were carried out simultaneously at each survey site.

One of the service stations was also a subject of a special survey which included counts of vehicle movements into and out of the station for each 24 hours over a 7-day period, in order to gain an insight into the daily and hourly visitation patterns. Video monitoring was used to collect the traffic generation data from 7:00 pm to 6:00 am.

2 SURVEY SITE DETAILS

The selection of appropriate survey sites was the key process in the project.

The following attributes were used for selection of the survey sites:

- mostly fairly recent developments
- some on-site parking provision
- reasonable geographic spread
- include at least one Coles / one Woolworths / one independent branded outlet
- ease of isolating the site from other developments for survey purposes and the collection of the required trip information
- the majority to have attached convenience stores
- at least one of the sites to have an associated fast food outlet
- availability of relevant information on the building (site plan, areas, dimensions, vehicle entrances & exits, number of parking spaces, etc)

Table 2.1 Survey sites.

SITE ID	NAME	ADDRESS
Site 1	SHELL – WATERLOO	867 South Dowling St, Waterloo
Site 2	BP – PADSTOW	9 Davies Road, Padstow
Site 3	CALTEX – HEATHCOTE	1403 Princes Highway, Heathcote
Site 4	APW – GREYSTANES	449 Great Western Hwy, Greystanes
Site 5	7-Eleven – SOUTH PENRITH	45 Aspen St, South Penrith
Site 6	BP – KINGS PARK	162 Sunnyholt Rd, Kings Park
Site 7	CALTEX – LIVERPOOL	67 Orange Grove Rd, Liverpool
Site 8	CALTEX - RIVERSTONE	1 Woodland St, Riverstone
Site 9	7-Eleven - BARGO	Hume Hwy, Bargo
Site 10	BP - KINGSGROVE	146-152 Moorefields Rd, Kingsgrove

Site 1 was selected for a special detailed survey for a 7-day period, for the following reasons.

- This station presents the last opportunity for fuelling on the southern approach to the CBD
- Last service station between the airport and the CBD
- It is located on the main approach to a major sports / entertainment venue (Moore Park)
- The station contains additional services (a fast food outlet and a car wash)

2.1 Survey site locations

Locations of the survey sites are shown in **Figure 2.1**.

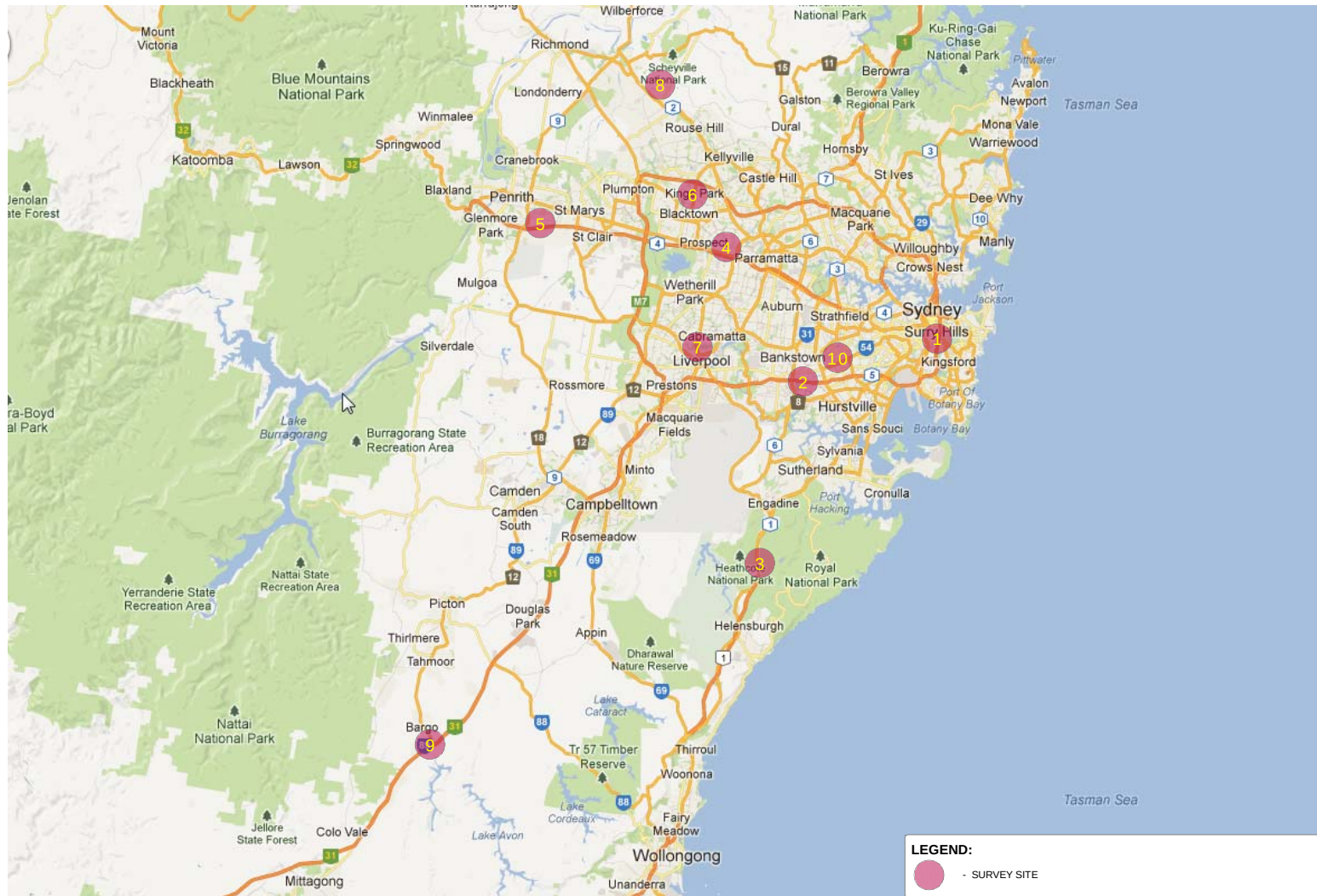


Figure 2.1 Survey site locations.

2.2 Details of the selected survey sites

2.2.1 Site 1 Coles Express, Waterloo

Table 2.2 Survey site details – Site 1.

Name of the development	Shell Express	
Address	867 South Dowling St, Waterloo	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	140	24 hours
<i>Additional businesses on the site</i>		
fast food (Hungry Jack's, 38 seats)	150	24 hours
car wash	52	24 hours
Total GFA, m ²	342	
Total site area, m ²	3540	
Total number of employees on a typical shift	3	
Hours of opening for fuel	24 hours	
Surrounding landuses	commercial / retail / residential	
On-street parking regime	"No stopping" on the frontage road	
Frontage road characteristics	Major arterial, 3 lanes in each direction	
Number of pumps (ie the number of vehicles able to be served at once)	12	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	6	



Figure 2.2 Site 1 – Survey site location and view.



Figure 2.3 Site 1 – Survey site layout and details..

2.2.2 Site 2 BP, Davies Road, Padstow.

Table 2.3 Survey site details – Site 2.

Name of the development	BP	
Address	9 Davies Road, Padstow	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	261	24 hours
<i>Additional businesses on the site</i>		
fast food (Subway, 26 seats)	220	7 am to 9 pm
car wash	60	24 hours
Total GFA, m ²	542	
Total site area, m ²	3957	
Total number of employees on a typical shift	10	
Hours of opening for fuel	24 hours	
Surrounding landuses	industrial to north & south, vacant lands to east, low density residential to west	
On-street parking regime	"No parking" on the frontage road	
Frontage road characteristics	Arterial, 2 lanes in each direction, median	
Number of pumps (ie the number of vehicles able to be served at once)	12	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	6	



Figure 2.4 Site 2 – Survey site location and view.



Figure 2.5 Site 2 – Survey site layout and details.

2.2.3 Site 3 Caltex Woolworths, Princes Highway, Heathcote.

Table 2.4 Survey site details – Site 3.

Name of the development	Caltex Woolworths	
Address	1403 Princes Highway, Heathcote	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	193.5	24 hours
<i>Additional businesses on the site</i>		
none		
Total GFA, m ²	193.5	
Total site area, m ²	1860	
Total number of employees on a typical shift	2-3	
Hours of opening for fuel	24 hours	
Surrounding landuses	low density residential to north-west; national park to south-east	
On-street parking regime	"Clearway" on the station side, 3pm-7pm weekdays	
Frontage road characteristics	Major arterial, 3 lanes in each direction, median	
Number of pumps (ie the number of vehicles able to be served at once)	12	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	6	



Figure 2.6 Site 3 – Survey site location and view.



Figure 2.7 Site 3 – Survey site layout and detail.

2.2.4 Site 4 APW, Great Western Hwy, Greystanes.

Table 2.5 Survey site details – Site 4.

Name of the development	APW	
Address	449 Great Western Hwy, Greystanes	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	144.5	5 am to 12 midnight
<i>Additional businesses on the site</i>		
car wash	38	6 am to 9 pm
Total GFA, m ²	182.5	
Total site area, m ²	1652	
Total number of employees on a typical shift	2-3	
Hours of opening for fuel	5 am to 12 midnight	
Surrounding landuses	low density residential to north/south/west; commercial/industrial to east	
On-street parking regime	"No stopping" on the main road frontage; 1P on minor road frontage	
Frontage road characteristics	Major arterial, 3 lanes in each direction, median	
Number of pumps (ie the number of vehicles able to be served at once)	8	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	4	

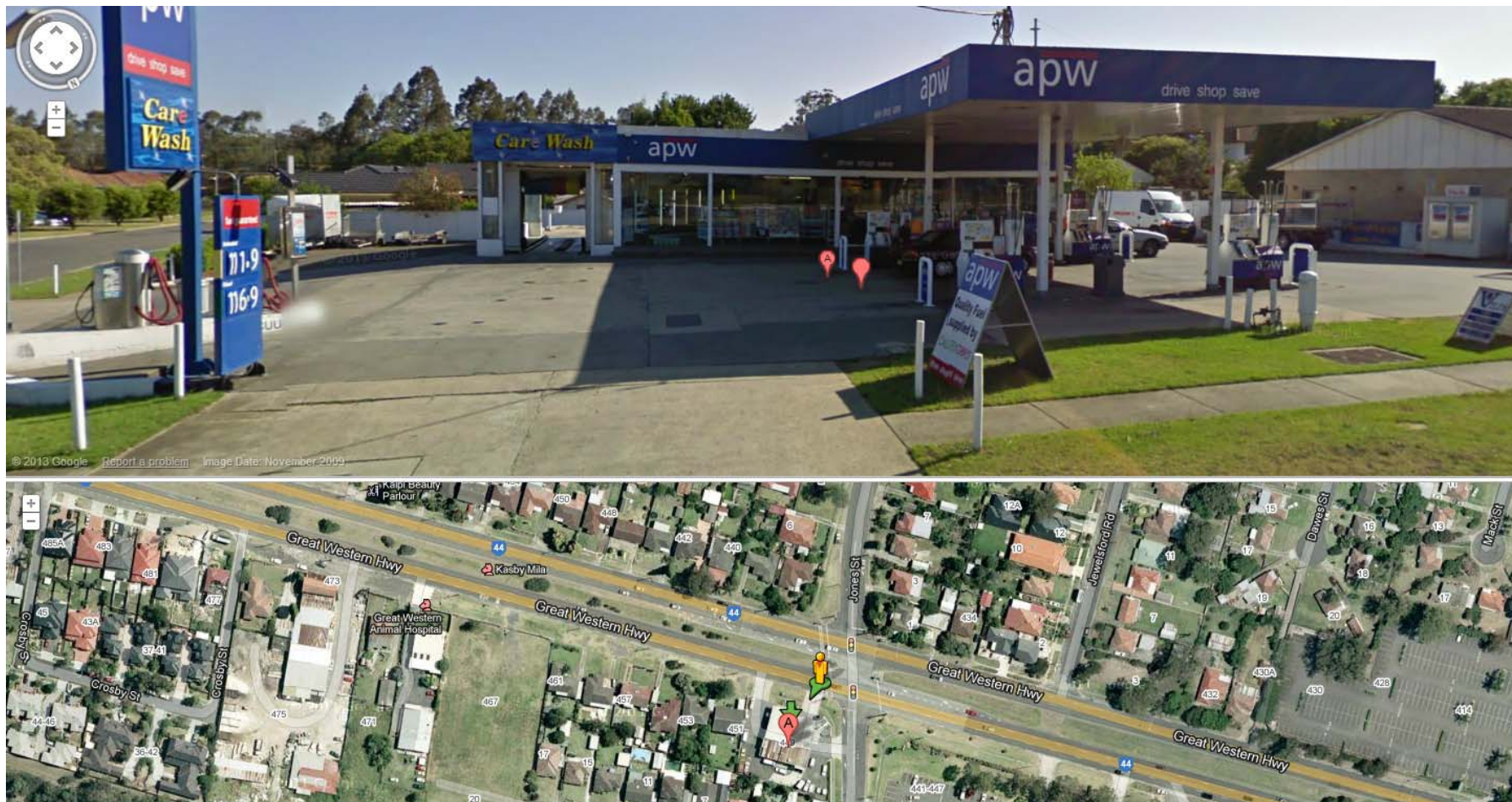


Figure 2.8 Site 4 – Survey site location and view.



Figure 2.9 Site 4 – Survey site layout and detail.

2.2.5 Site 5 7-Eleven, Aspen St, South Penrith .

Table 2.6 Survey site details – Site 5.

Name of the development	7-Eleven	
Address	15-19 Aspen St, South Penrith	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	265	24 hours
<i>Additional businesses on the site</i>		
none		
Total GFA, m ²	265	
Total site area, m ²	4392	
Total number of employees on a typical shift	2	
Hours of opening for fuel	24 hours	
Surrounding landuses	commercial in the immediate vicinity; low density residential around	
On-street parking regime	"No parking" on both the main road and on the service lane where access is gained from	
Frontage road characteristics	2-lane service road to retail/fast food complex off the parallel arterial road (2 lanes in each direction)	
Number of pumps (ie the number of vehicles able to be served at once)	6	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	6	



Figure 2.10 Site 5 – Survey site location and view (note: the view shows the previous operator's signage).



Figure 2.11 Site 5 – Survey site layout and details.

2.2.6 Site 6 BP, Sunnyholt Rd, Kings Park.

Table 2.7 Survey site details – Site 6.

Name of the development	BP	
Address	162 Sunnyholt Rd, Kings Park	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	90	4:30 am to midnight
<i>Additional businesses on the site</i>		
car wash	73	4:30 am to midnight
car service	100	7:30 am to 5:00 pm
Total GFA, m ²	263	
Total site area, m ²	1031	
Total number of employees on a typical shift	4-5	
Hours of opening for fuel	4:30 am to midnight	
Surrounding landuses	industrial/commercial to north/south/west; low density residential to east	
On-street parking regime	"No parking" on the main frontage road; no restrictions on the secondary road	
Frontage road characteristics	Main - arterial road, 2 lanes in each direction, median; secondary - local street, 2 traffic + 2 parking lanes	
Number of pumps (ie the number of vehicles able to be served at once)	4	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	4	



Figure 2.12 Site 6 – Survey site location and view.



Figure 2.13 Site 6 – Survey site layout and details.

2.2.7 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool.

Table 2.8 Survey site details – Site 7

Name of the development	Caltex - Woolworths	
Address	67 Orange Grove Rd, Liverpool	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	443	24 hours
<i>Additional businesses on the site</i>		
none		
Total GFA, m ²	443	
Total site area, m ²	3798	
Total number of employees on a typical shift	2	
Hours of opening for fuel	24 hours	
Surrounding landuses	commercial / retail to east; low density residential to north/south/west	
On-street parking regime	"No stopping" on the frontage road	
Frontage road characteristics	Arterial road, 2 lanes in each direction, median	
Number of pumps (ie the number of vehicles able to be served at once)	20	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	10	



Figure 2.14 Site 7 – Survey site location and view.



Figure 2.15 Site 7– Survey site layout and details.

2.2.8 Site 8 Caltex – Woolworths, Woodland St, Riverstone.

Table 2.9 Survey site details – Site 8.

Name of the development	Caltex - Woolworths	
Address	1 Woodland St, Riverstone	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	197	24 hours
<i>Additional businesses on the site</i>		
none		
Total GFA, m ²	197	
Total site area, m ²	3187	
Total number of employees on a typical shift	2	
Hours of opening for fuel	24 hours	
Surrounding landuses	commercial / retail / residential	
On-street parking regime	"No stopping" on the frontage road	
Frontage road characteristics	Major arterial, 3 lanes in each direction	
Number of pumps (ie the number of vehicles able to be served at once)	16	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	8	

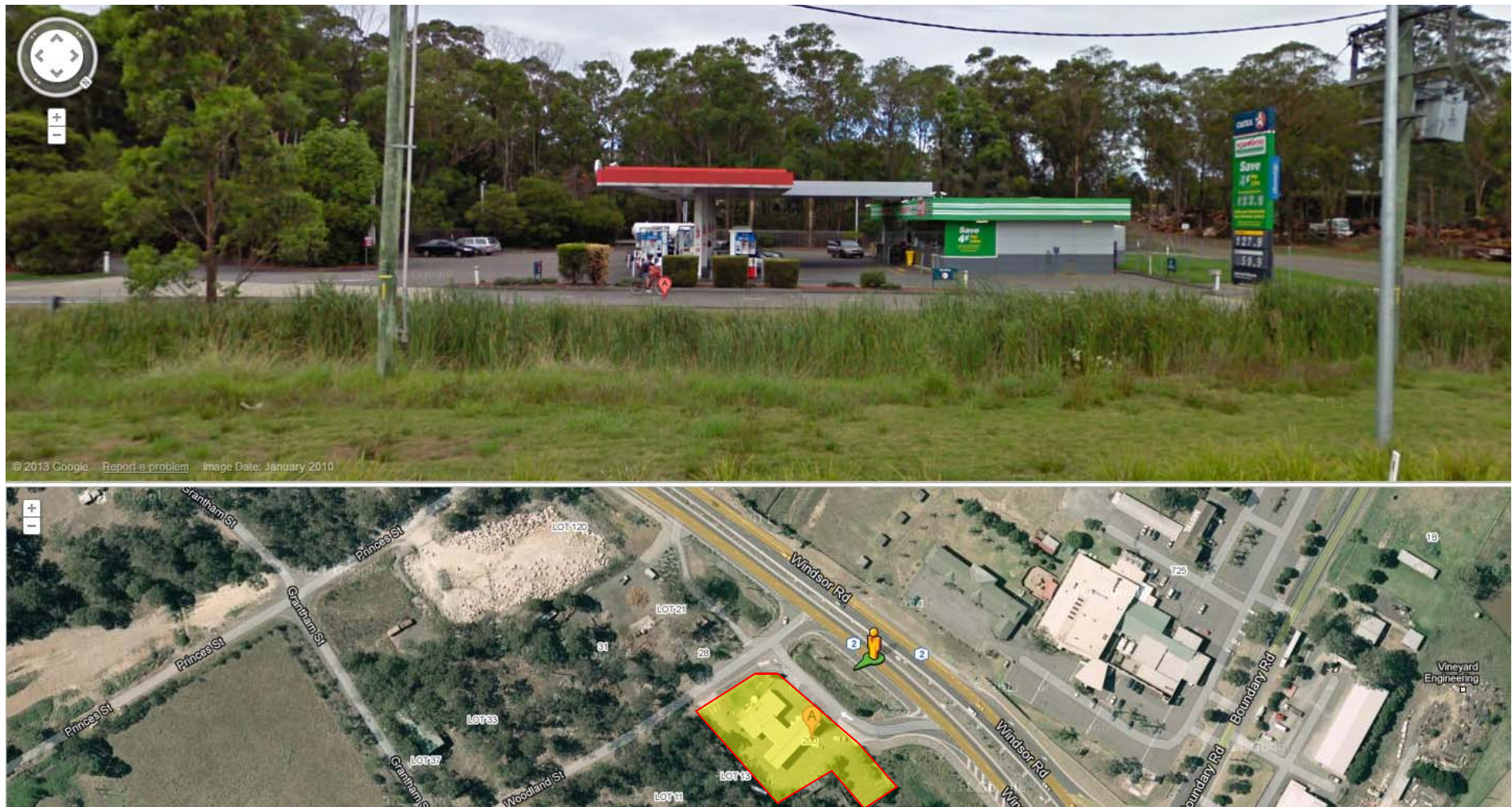


Figure 2.16 Site 8 – Survey site location and view.



Figure 2.17 Site 8– Survey site layout and details.

2.2.9 Site 9 7-Eleven, Hume Highway, Bargo.

Table 2.10 Survey site details – Site 9.

Name of the development	7-Eleven	
Address	Hume Highway, Bargo	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	200	24 hours
<i>Additional businesses on the site</i>		
fast food (Sodexo, 28 seats)	138	24 hours
sheds	53	
Total GFA, m ²	391	
Total site area, m ²	11030	
Total number of employees on a typical shift	8-9	
Hours of opening for fuel	24 hours	
Surrounding landuses	vacant land	
On-street parking regime	"No stopping" on the freeway; no restrictions on the service road where access is gained from; the site is used as a rest area by truck drivers; it also used by many people for toilet/coffee breaks.	
Frontage road characteristics	Freeway, 2 lanes in each direction, median; service road - one-way southbound, one traffic lane, one parking lane (marked) and parking on the other shoulder	
Number of pumps (ie the number of vehicles able to be served at once)	16	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	12	

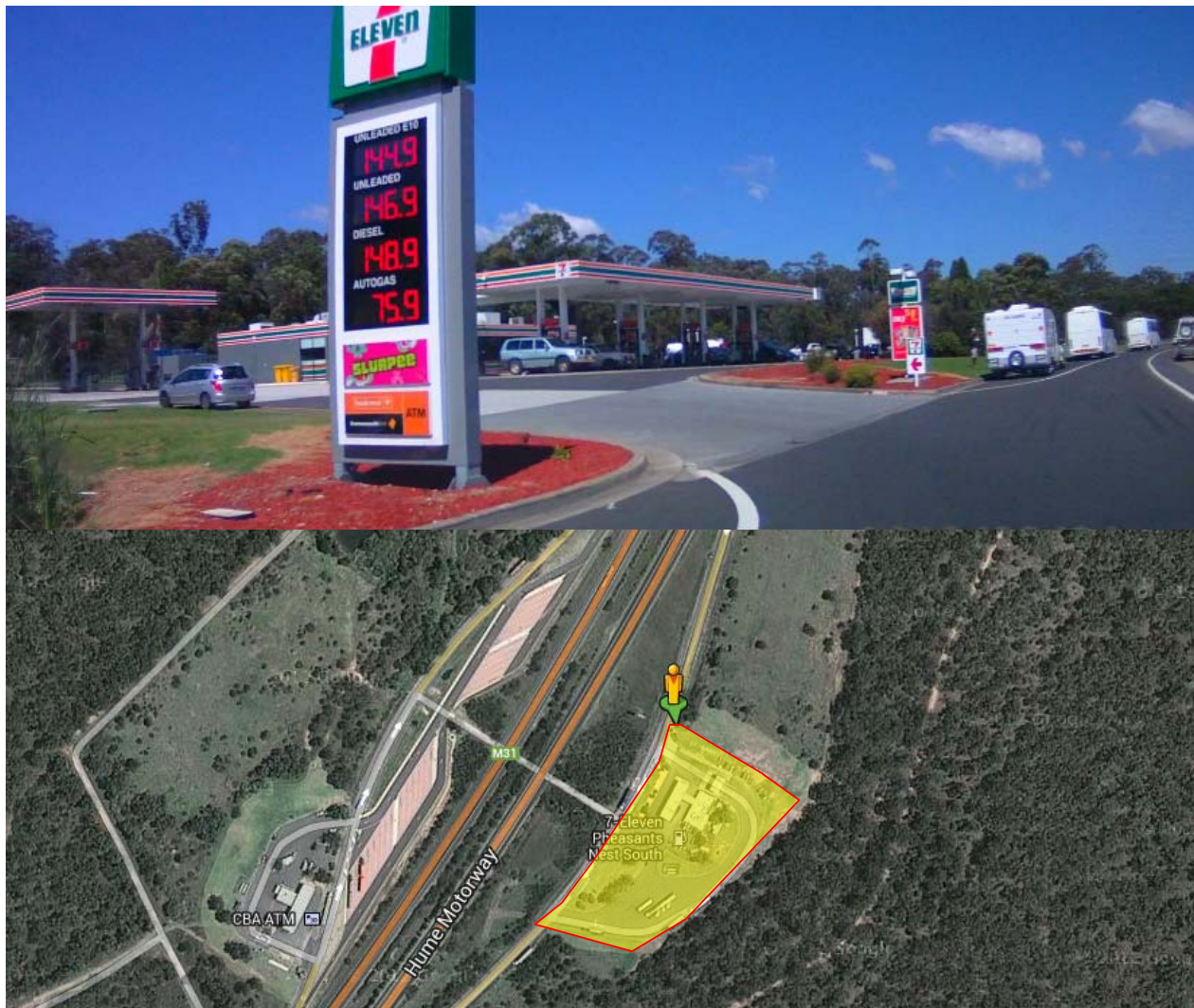


Figure 2.18 Site 9 – Survey site location and view.



Figure 2.19 Site 9– Survey site layout and details.

2.2.10 Site 10 BP, Moorefields Rd, Kingsgrove .

Table 2.11 Survey site details – Site 10.

Name of the development	BP	
Address	146-152 Moorefields Rd, Kingsgrove	
Building area	GFA, m ²	opening hours
Main building (excluding additional businesses)	245	5 am to 11 pm
<i>Additional businesses on the site</i>		
none		
Total GFA, m ²	245	
Total site area, m ²	988	
Total number of employees on a typical shift	2	
Hours of opening for fuel	5 am to 11 pm	
Surrounding landuses	low density residential	
On-street parking regime	"No parking" along site frontage on the main road, otherwise no parking restrictions in neither main nor side roads	
Frontage road characteristics	Collector road, 2 traffic lanes plus 2 parking lanes, no median	
Number of pumps (ie the number of fuel outlets on the forecourt)	8	
Number of service channels (ie the number of access lanes leading to the fuel pumps)	4	

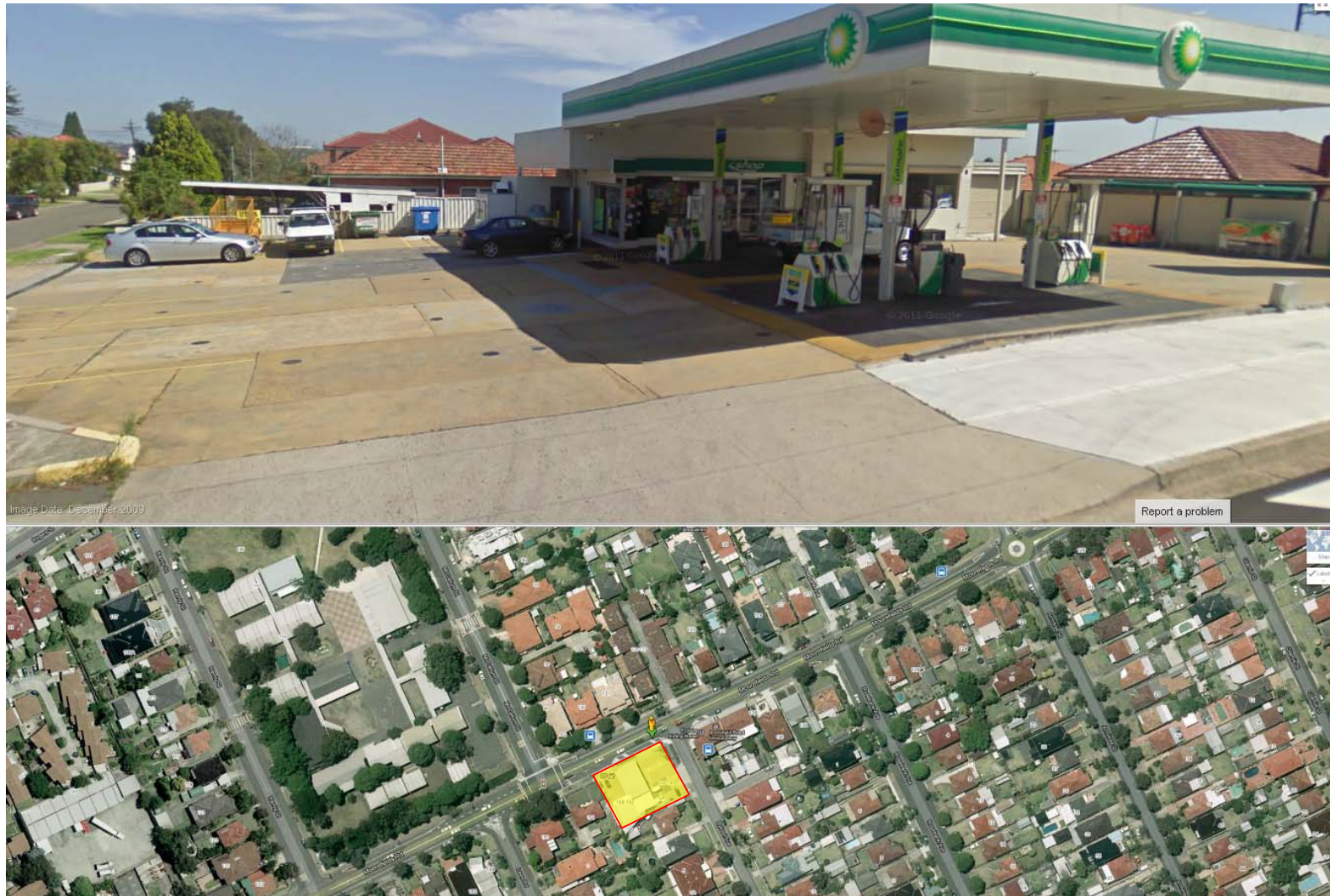


Figure 2.20 Site 10 – Survey site location and view.



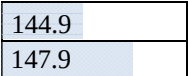
Figure 2.21 Site 10– Survey site layout and detail.

3 SURVEY RESULTS

Legend for colours used in table cells.

 site activity peak hours and concurrent traffic generation or parking accumulation values

 frontage road peak hours and concurrent traffic generation values

 cell colour fill represents petrol price level within the range observed on the survey day

3.1.1 Site 1 Coles Express, South Dowling St, Waterloo

Table 3.1 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Monday 20/05/2013.

Mon 20/05/13	Coles Express, South Dowling St, Waterloo										Grandtotal - site	Main Road Data	Grandtotal - Main Road	On-site parking demand	Petrol price			
15 minute Data	Vehicles										15 minute Data	15 minute Data	15 minute Data	15 minute Data	15 minute Data			
WEATHER Fine	IN					OUT												
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total								
TIME	light	heavy	fast food			light	heavy	fast food										
6:00 to 6:15	16	2	6	1	19	15	1	5	0	16	35	334	17	351	5	0	5	127.9
6:15 to 6:30	14	3	4	0	17	15	2	3	0	17	34	371	20	391	5	2	7	127.9
6:30 to 6:45	13	1	6	0	14	14	3	7	0	17	31	384	16	400	5	0	5	127.9
6:45 to 7:00	9	2	6	0	11	7	2	6	0	9	20	424	31	455	5	0	5	127.9
7:00 to 7:15	12	0	4	0	12	13	0	5	0	13	25	347	25	372	6	1	7	127.9
7:15 to 7:30	13	1	7	0	14	13	1	7	1	15	29	433	18	451	5	1	6	127.9
7:30 to 7:45	10	2	3	0	12	11	0	4	0	11	23	395	7	402	5	1	6	127.9
7:45 to 8:00	10	1	4	0	11	11	3	4	0	14	25	406	10	416	4	0	4	127.9
8:00 to 8:15	7	0	2	0	7	10	0	2	0	10	17	385	11	396	4	0	4	127.9
8:15 to 8:30	15	1	7	1	17	13	0	6	0	13	30	357	14	371	5	0	5	127.9
8:30 to 8:45	7	1	2	0	8	6	1	1	0	7	15	387	13	400	4	0	4	127.9
8:45 to 9:00	10	0	2	0	10	7	1	2	0	8	18	329	11	340	4	0	4	127.9
9:00 to 9:15	14	0	3	0	14	11	1	3	1	13	27	374	10	384	4	0	4	127.9
9:15 to 9:30	15	2	3	0	17	18	1	1	0	19	36	405	19	424	6	0	6	127.9
9:30 to 9:45	12	1	1	0	13	15	1	4	0	16	29	344	14	358	4	1	5	127.9
9:45 to 10:00	11	2	3	0	13	9	1	2	0	10	23	350	15	365	4	0	4	127.9
10:00 to 10:15	14	0	2	0	14	15	1	3	0	16	30	257	10	267	5	0	5	127.9
10:15 to 10:30	8	1	3	0	9	5	1	4	0	6	15	272	10	282	4	0	4	127.9
10:30 to 10:45	23	2	7	0	25	25	2	5	0	27	52	290	11	301	5	1	6	127.9
10:45 to 11:00	11	1	3	0	12	10	0	1	0	10	22	244	12	256	5	0	5	127.9
11:00 to 11:15	16	2	4	0	18	19	2	4	0	21	39	273	14	287	5	1	6	127.9
11:15 to 11:30	17	1	3	0	18	17	0	6	0	17	35	271	16	287	8	0	8	127.9
11:30 to 11:45	21	0	4	1	22	25	1	4	0	26	48	250	11	261	5	0	5	127.9
11:45 to 12:00	19	2	5	1	22	16	4	2	0	20	42	233	10	243	6	0	6	127.9
12:00 to 12:15	19	1	3	0	20	13	2	5	2	17	37	247	20	267	12	0	12	127.9
12:15 to 12:30	16	0	5	0	16	18	0	7	0	18	34	230	16	246	12	0	12	127.9
12:30 to 12:45	25	1	11	0	26	27	1	11	0	28	54	231	13	244	10	0	10	127.9
12:45 to 13:00	11	1	9	0	12	12	1	9	0	13	25	250	11	261	7	0	7	127.9
13:00 to 13:15	19	2	9	0	21	19	0	9	0	19	40	224	7	231	7	0	7	127.9
13:15 to 13:30	17	1	8	0	18	16	3	8	0	19	37	245	13	258	5	0	5	127.9
13:30 to 13:45	18	1	8	0	19	18	1	8	0	19	38	230	8	238	5	0	5	127.9
13:45 to 14:00	23	1	11	0	24	16	1	11	0	17	41	227	13	240	8	0	8	127.9
14:00 to 14:15	15	1	9	0	16	23	1	9	0	24	40	214	14	228	5	0	5	127.9
14:15 to 14:30	21	0	9	0	21	17	0	9	0	17	38	267	10	277	6	0	6	127.9
14:30 to 14:45	22	0	8	0	22	20	0	8	0	20	42	266	10	276	7	0	7	127.9
14:45 to 15:00	14	1	9	0	15	16	1	9	0	17	32	319	7	326	4	0	4	127.9
15:00 to 15:15	16	0	7	0	16	24	0	7	0	24	40	357	7	364	3	0	3	127.9
15:15 to 15:30	22	1	8	0	23	20	1	8	0	21	44	342	7	349	3	0	3	127.9
15:30 to 15:45	21	0	12	0	21	17	0	12	0	17	38	347	4	351	3	0	3	127.9
15:45 to 16:00	20	0	9	0	20	25	0	9	0	25	45	369	7	376	5	0	5	127.9
16:00 to 16:15	29	1	10	0	30	25	1	10	0	26	56	359	11	370	4	0	4	127.9
16:15 to 16:30	14	2	6	0	16	21	1	6	0	22	38	360	6	366	3	0	3	127.9
16:30 to 16:45	25	1	7	0	26	24	2	7	0	26	52	334	7	341	3	0	3	127.9
16:45 to 17:00	16	0	3	0	16	12	0	3	0	12	28	384	3	387	0	0	0	127.9
17:00 to 17:15	19	1	8	0	20	21	1	8	0	22	42	345	8	353	2	0	2	127.9
17:15 to 17:30	26	1	6	0	27	23	1	6	0	24	51	382	3	385	2	0	2	127.9
17:30 to 17:45	24	0	7	0	24	27	0	7	0	27	51	362	4	366	2	0	2	127.9
17:45 to 18:00	28	0	11	0	28	28	0	11	0	28	56	378	1	379	2	0	2	127.9
18:00 to 18:15	18	2	9	0	20	17	2	9	0	19	39	376	2	378	2	0	2	127.9
18:15 to 18:30	20	1	9	0	21	21	1	9	0	22	43	342	4	346	2	0	2	127.9
18:30 to 18:45	28	0	8	0	28	26	0	8	0	26	54	293	2	295	2	0	2	127.9
18:45 to 19:00	18	0	8	0	18	20	0	8	0	20	38	280	3	283	2	0	2	127.9
TOTAL	881	48	321	4	933	886	50		4	940	1873	16675	566	17241				

Table 3.2 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Monday 20/05/2013.

Mon 20/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo											Grandtotal 1-hour Data Vehicles	Main Road Data		Grandtotal - Main Road 1-hour Data Vehicles
WEATHER Fine	Vehicles												1-hour Data		
	IN					OUT							1-hour Data		
	Customer vehicles					Customer vehicles							LV	HV	
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total					
6:00 to 7:00	52	8	22	1	61	51	8	21	0	59	120	1513	84	1597	
6:15 to 7:15	48	6	20	0	54	49	7	21	0	56	110	1526	92	1618	
6:30 to 7:30	47	4	23	0	51	47	6	25	1	54	105	1588	90	1678	
6:45 to 7:45	44	5	20	0	49	44	3	22	1	48	97	1599	81	1680	
7:00 to 8:00	45	4	18	0	49	48	4	20	1	53	102	1581	60	1641	
7:15 to 8:15	40	4	16	0	44	45	4	17	1	50	94	1619	46	1665	
7:30 to 8:30	42	4	16	1	47	45	3	16	0	48	95	1543	42	1585	
7:45 to 8:45	39	3	15	1	43	40	4	13	0	44	87	1535	48	1583	
8:00 to 9:00	39	2	13	1	42	36	2	11	0	38	80	1458	49	1507	
8:15 to 9:15	46	2	14	1	49	37	3	12	1	41	90	1447	48	1495	
8:30 to 9:30	46	3	10	0	49	42	4	7	1	47	96	1495	53	1548	
8:45 to 9:45	51	3	9	0	54	51	4	10	1	56	110	1452	54	1506	
9:00 to 10:00	52	5	10	0	57	53	4	10	1	58	115	1473	58	1531	
9:15 to 10:15	52	5	9	0	57	57	4	10	0	61	118	1356	58	1414	
9:30 to 10:30	45	4	9	0	49	44	4	13	0	48	97	1223	49	1272	
9:45 to 10:45	56	5	15	0	61	54	5	14	0	59	120	1169	46	1215	
10:00 to 11:00	56	4	15	0	60	55	4	13	0	59	119	1063	43	1106	
10:15 to 11:15	58	6	17	0	64	59	5	14	0	64	128	1079	47	1126	
10:30 to 11:30	67	6	17	0	73	71	4	16	0	75	148	1078	53	1131	
10:45 to 11:45	65	4	14	1	70	71	3	15	0	74	144	1038	53	1091	
11:00 to 12:00	73	5	16	2	80	77	7	16	0	84	164	1027	51	1078	
11:15 to 12:15	76	4	15	2	82	71	7	17	2	80	162	1001	57	1058	
11:30 to 12:30	75	3	17	2	80	72	7	18	2	81	161	960	57	1017	
11:45 to 12:45	79	4	24	1	84	74	7	25	2	83	167	941	59	1000	
12:00 to 13:00	71	3	28	0	74	70	4	32	2	76	150	958	60	1018	
12:15 to 13:15	71	4	34	0	75	76	2	36	0	78	153	935	47	982	
12:30 to 13:30	72	5	37	0	77	74	5	37	0	79	156	950	44	994	
12:45 to 13:45	65	5	34	0	70	65	5	34	0	70	140	949	39	988	
13:00 to 14:00	77	5	36	0	82	69	5	36	0	74	156	926	41	967	
13:15 to 14:15	73	4	36	0	77	73	6	36	0	79	156	916	48	964	
13:30 to 14:30	77	3	37	0	80	74	3	37	0	77	157	938	45	983	
13:45 to 14:45	81	2	37	0	83	76	2	37	0	78	161	974	47	1021	
14:00 to 15:00	72	2	35	0	74	76	2	35	0	78	152	1066	41	1107	
14:15 to 15:15	73	1	33	0	74	77	1	33	0	78	152	1209	34	1243	
14:30 to 15:30	74	2	32	0	76	80	2	32	0	82	158	1284	31	1315	
14:45 to 15:45	73	2	36	0	75	77	2	36	0	79	154	1365	25	1390	
15:00 to 16:00	79	1	36	0	80	86	1	36	0	87	167	1415	25	1440	
15:15 to 16:15	92	2	39	0	94	87	2	39	0	89	183	1417	29	1446	
15:30 to 16:30	84	3	37	0	87	88	2	37	0	90	177	1435	28	1463	
15:45 to 16:45	88	4	32	0	92	95	4	32	0	99	191	1422	31	1453	
16:00 to 17:00	84	4	26	0	88	82	4	26	0	86	174	1437	27	1464	
16:15 to 17:15	74	4	24	0	78	78	4	24	0	82	160	1423	24	1447	
16:30 to 17:30	86	3	24	0	89	80	4	24	0	84	173	1445	21	1466	
16:45 to 17:45	85	2	24	0	87	83	2	24	0	85	172	1473	18	1491	
17:00 to 18:00	97	2	32	0	99	99	2	32	0	101	200	1467	16	1483	
17:15 to 18:15	96	3	33	0	99	95	3	33	0	98	197	1498	10	1508	
17:30 to 18:30	90	3	36	0	93	93	3	36	0	96	189	1458	11	1469	
17:45 to 18:45	94	3	37	0	97	92	3	37	0	95	192	1389	9	1398	
18:00 to 19:00	84	3	34	0	87	84	3	34	0	87	174	1291	11	1302	

Table 3.3 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Monday 20/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:45 to 12:45	79	4	24	1	84	74	7	25	2	83	167	941	59	1000
PM														
17:00 to 18:00	97	2	32	0	99	99	2	32	0	101	200	1467	16	1483

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
6:45 to 7:45	44	5	20	0	49	44	3	22	1	48	97	1599	81	1680
PM														
17:15 to 18:15	96	3	33	0	99	95	3	33	0	98	197	1498	10	1508

Table 3.4 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Monday 20/05/2013.

Mon 20/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	52	8	22	1	61	51	8	21	0	59	120	1513	84	1597
7:00 to 8:00	45	4	18	0	49	48	4	20	1	53	102	1581	60	1641
8:00 to 9:00	39	2	13	1	42	36	2	11	0	38	80	1458	49	1507
9:00 to 10:00	52	5	10	0	57	53	4	10	1	58	115	1473	58	1531
10:00 to 11:00	56	4	15	0	60	55	4	13	0	59	119	1063	43	1106
11:00 to 12:00	73	5	16	2	80	77	7	16	0	84	164	1027	51	1078
12:00 to 13:00	71	3	28	0	74	70	4	32	2	76	150	958	60	1018
13:00 to 14:00	77	5	36	0	82	69	5	36	0	74	156	926	41	967
14:00 to 15:00	72	2	35	0	74	76	2	35	0	78	152	1066	41	1107
15:00 to 16:00	79	1	36	0	80	86	1	36	0	87	167	1415	25	1440
16:00 to 17:00	84	4	26	0	88	82	4	26	0	86	174	1437	27	1464
17:00 to 18:00	97	2	32	0	99	99	2	32	0	101	200	1467	16	1483
18:00 to 19:00	84	3	34	0	87	84	3	34	0	87	174	1291	11	1302
Total	881	48	321	4	933	886	50	322	4	940	1873	16675	566	17241

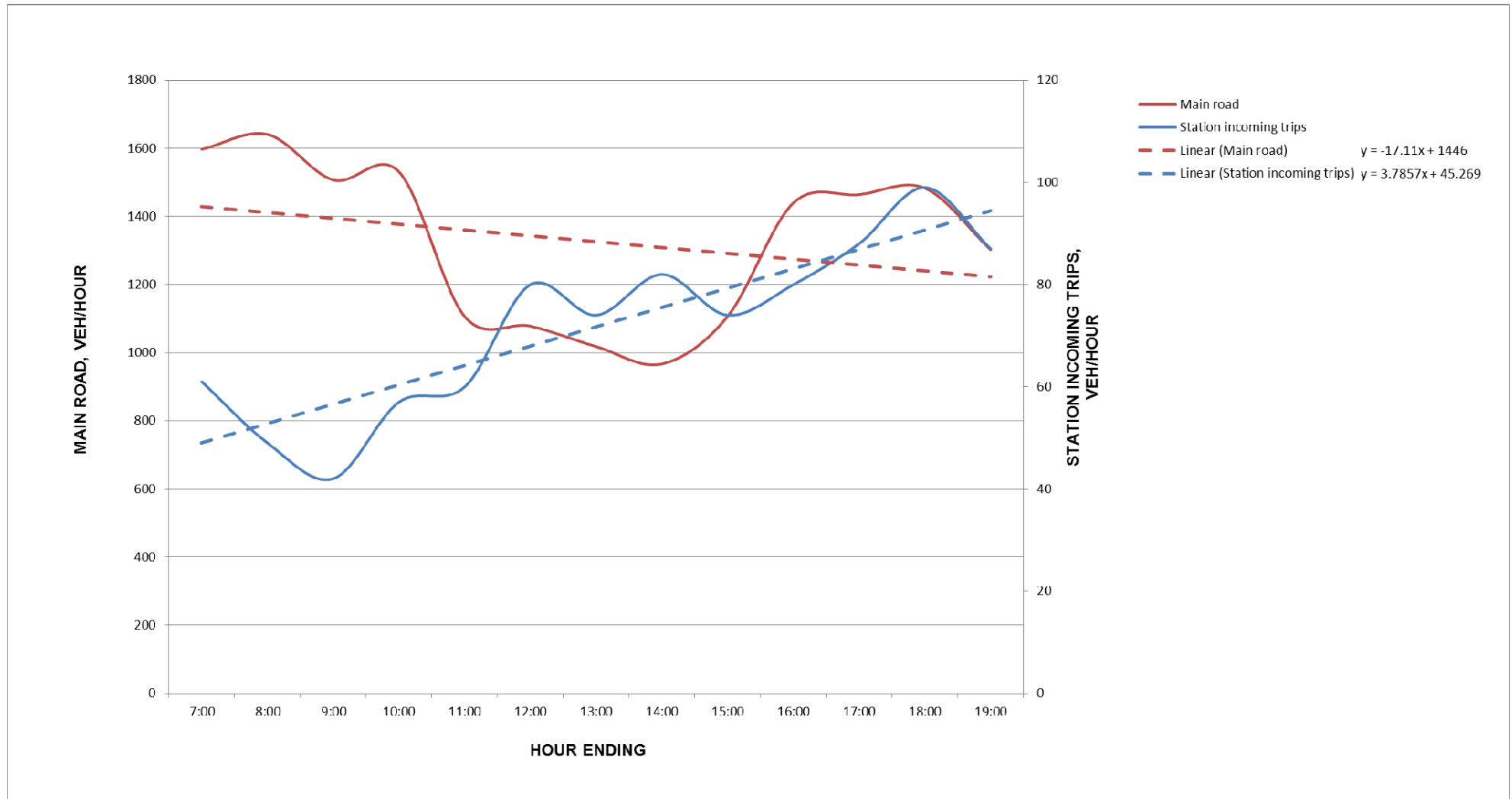


Figure 3.22 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Monday 20/05/2013.

Table 3.5 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Tuesday 21/05/2013.

Tue 21/05/13			Coles Express, South Dowling St, Waterloo										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price	
15 minute Data			Vehicles											15 minute Data	15 minute Data		15 minute Data			15 minute Data	
WEATHER Fine	IN					OUT															
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total											
	light	heavy	fast food			light	heavy	fast food													
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10			
6:00 to 6:15	12	2	3	0	14	12	1	5	0	13	27	302	15	317	317	4	0	4	127.9		
6:15 to 6:30	10	4	2	0	14	10	5	2	0	15	29	397	29	426	426	4	0	4	127.9		
6:30 to 6:45	11	3	5	0	14	14	2	4	0	16	30	371	21	392	392	4	0	4	127.9		
6:45 to 7:00	12	2	2	1	15	10	2	0	1	13	28	361	27	388	388	4	0	4	127.9		
7:00 to 7:15	16	1	4	0	17	16	0	5	0	16	33	334	27	361	361	6	1	7	127.9		
7:15 to 7:30	15	1	7	0	16	12	2	10	0	14	30	380	36	416	416	6	0	6	127.9		
7:30 to 7:45	10	4	6	0	14	13	3	4	0	16	30	360	22	382	382	5	0	5	127.9		
7:45 to 8:00	7	0	2	0	7	7	2	1	0	9	16	405	24	429	429	5	0	5	127.9		
8:00 to 8:15	7	0	3	0	7	8	0	4	0	8	15	428	9	437	437	5	0	5	127.9		
8:15 to 8:30	17	2	5	0	19	14	1	4	0	15	34	364	11	375	375	6	2	8	127.9		
8:30 to 8:45	16	3	2	0	19	14	4	3	0	18	37	378	12	390	390	5	0	5	127.9		
8:45 to 9:00	16	2	3	0	18	14	3	3	0	17	35	338	10	348	348	5	0	5	127.9		
9:00 to 9:15	18	1	7	0	19	16	1	4	0	17	36	408	17	425	425	5	0	5	127.9		
9:15 to 9:30	9	0	1	0	9	12	0	3	0	12	21	334	12	346	346	5	0	5	127.9		
9:30 to 9:45	18	3	4	0	21	16	2	7	0	18	39	378	9	387	387	6	1	7	127.9		
9:45 to 10:00	10	1	1	1	12	11	2	0	1	14	26	367	21	388	388	6	0	6	127.9		
10:00 to 10:15	12	2	3	0	14	12	1	2	0	13	27	315	12	327	327	6	0	6	127.9		
10:15 to 10:30	16	2	5	0	18	15	4	5	0	19	37	284	22	306	306	7	1	8	127.9		
10:30 to 10:45	17	2	7	0	19	19	1	8	0	20	39	259	16	275	275	7	0	7	127.9		
10:45 to 11:00	17	0	8	0	17	10	0	6	0	10	27	240	22	262	262	12	0	12	127.9		
11:00 to 11:15	20	2	9	0	22	20	1	10	0	21	43	271	18	289	289	12	0	12	127.9		
11:15 to 11:30	6	3	4	0	9	11	2	6	0	13	22	238	15	253	253	10	1	11	127.9		
11:30 to 11:45	22	1	7	0	23	21	2	4	0	23	46	255	18	273	273	11	0	11	127.9		
11:45 to 12:00	12	0	2	0	12	17	1	3	0	18	30	273	17	290	290	6	0	6	127.9		
12:00 to 12:15	20	1	9	0	21	15	1	10	0	16	37	275	14	289	289	11	0	11	127.9		
12:15 to 12:30	17	2	2	0	19	17	2	7	0	19	38	312	16	328	328	12	1	13	127.9		
12:30 to 12:45	18	1	7	0	19	15	2	6	0	17	36	284	16	300	300	10	0	10	127.9		
12:45 to 13:00	13	0	12	0	13	16	0	5	0	16	29	287	15	302	302	20	0	20	127.9		
13:00 to 13:15	11	0	15	0	11	28	0	13	0	28	39	282	13	295	295	17	0	17	127.9		
13:15 to 13:30	8	1	10	0	9	9	1	9	0	10	19	301	21	322	322	16	0	16	127.9		
13:30 to 13:45	8	2	6	0	10	11	0	12	0	11	21	218	15	233	233	15	0	15	127.9		
13:45 to 14:00	9	9	8	0	18	13	2	9	0	15	33	281	16	297	297	12	0	12	127.9		
14:00 to 14:15	9	2	5	0	11	12	1	7	0	13	24	338	18	356	356	14	0	14	127.9		
14:15 to 14:30	11	2	9	0	13	11	1	7	0	12	25	331	17	348	348	16	0	16	127.9		
14:30 to 14:45	12	0	3	0	12	7	1	10	0	8	20	339	13	352	352	13	0	13	127.9		
14:45 to 15:00	8	1	3	0	9	10	2	9	0	12	21	316	13	329	329	9	1	10	127.9		
15:00 to 15:15	12	1	4	0	13	8	1	9	0	9	22	358	17	375	375	7	0	7	127.9		
15:15 to 15:30	14	0	3	0	14	13	0	10	0	13	27	317	11	328	328	6	0	6	127.9		
15:30 to 15:45	9	0	4	0	9	15	0	4	0	15	24	341	10	351	351	5	0	5	127.9		
15:45 to 16:00	13	0	4	0	13	10	0	5	0	10	23	334	13	347	347	7	1	8	127.9		
16:00 to 16:15	17	4	5	0	21	16	2	5	0	18	39	323	10	333	333	11	1	12	127.9		
16:15 to 16:30	9	1	4	0	10	13	2	6	0	15	25	377	5	382	382	10	0	10	127.9		
16:30 to 16:45	16	2	3	0	18	13	3	4	0	16	34	364	7	371	371	9	0	9	127.9		
16:45 to 17:00	15	0	4	0	15	18	1	6	0	19	34	395	9	404	404	7	0	7	127.9		
17:00 to 17:15	18	1	1	0	19	10	0	4	0	10	29	348	9	357	357	9	0	9	127.9		
17:15 to 17:30	13	1	3	0	14	24	0	3	0	24	38	383	5	388	388	10	1	11	127.9		
17:30 to 17:45	12	0	4	0	12	11	2	7	0	13	25	384	4	388	388	9	0	9	127.9		
17:45 to 18:00	11	1	1	0	12	8	1	1	0	9	21	420	1	421	421	8	0	8	127.9		
18:00 to 18:15	11	2	5	0	13	14	2	3	0	16	29	402	1	403	403	10	0	10	127.9		
18:15 to 18:30	12	0	6	0	12	11	0	8	0	11	23	380	3	383	383	6	0	6	127.9		
18:30 to 18:45	9	1	6	0	10	13	1	3	0	14	24	377	3	380	380	10	0	10	127.9		
18:45 to 19:00	8	0	8	0	8	9	0	11	0	9	17	324	6	330	330	9	0	9	127.9		
TOTAL	669	76	256	2	747	694	70		2	766	1513	17431	743	18174							

Table 3.6 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Tuesday 21/05/2013.

Tue 21/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT						LV	HV	
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total				
TIME	light	heavy	fast food			light	heavy	fast food			light	heavy	fast food	Vehicles
6:00 to 7:00	45	11	12	1	57	46	10	11	1	57	114	1431	92	1523
6:15 to 7:15	49	10	13	1	60	50	9	11	1	60	120	1463	104	1567
6:30 to 7:30	54	7	18	1	62	52	6	19	1	59	121	1446	111	1557
6:45 to 7:45	53	8	19	1	62	51	7	19	1	59	121	1435	112	1547
7:00 to 8:00	48	6	19	0	54	48	7	20	0	55	109	1479	109	1588
7:15 to 8:15	39	5	18	0	44	40	7	19	0	47	91	1573	91	1664
7:30 to 8:30	41	6	16	0	47	42	6	13	0	48	95	1557	66	1623
7:45 to 8:45	47	5	12	0	52	43	7	12	0	50	102	1575	56	1631
8:00 to 9:00	56	7	13	0	63	50	8	14	0	58	121	1508	42	1550
8:15 to 9:15	67	8	17	0	75	58	9	14	0	67	142	1488	50	1538
8:30 to 9:30	59	6	13	0	65	56	8	13	0	64	129	1458	51	1509
8:45 to 9:45	61	6	15	0	67	58	6	17	0	64	131	1458	48	1506
9:00 to 10:00	55	5	13	1	61	55	5	14	1	61	122	1487	59	1546
9:15 to 10:15	49	6	9	1	56	51	5	12	1	57	113	1394	54	1448
9:30 to 10:30	56	8	13	1	65	54	9	14	1	64	129	1344	64	1408
9:45 to 10:45	55	7	16	1	63	57	8	15	1	66	129	1225	71	1296
10:00 to 11:00	62	6	23	0	68	56	6	21	0	62	130	1098	72	1170
10:15 to 11:15	70	6	29	0	76	64	6	29	0	70	146	1054	78	1132
10:30 to 11:30	60	7	28	0	67	60	4	30	0	64	131	1008	71	1079
10:45 to 11:45	65	6	28	0	71	62	5	26	0	67	138	1004	73	1077
11:00 to 12:00	60	6	22	0	66	69	6	23	0	75	141	1037	68	1105
11:15 to 12:15	60	5	22	0	65	64	6	23	0	70	135	1041	64	1105
11:30 to 12:30	71	4	20	0	75	70	6	24	0	76	151	1115	65	1180
11:45 to 12:45	67	4	20	0	71	64	6	26	0	70	141	1144	63	1207
12:00 to 13:00	68	4	30	0	72	63	5	28	0	68	140	1158	61	1219
12:15 to 13:15	59	3	36	0	62	76	4	31	0	80	142	1165	60	1225
12:30 to 13:30	50	2	44	0	52	68	3	33	0	71	123	1154	65	1219
12:45 to 13:45	40	3	43	0	43	64	1	39	0	65	108	1088	64	1152
13:00 to 14:00	36	12	39	0	48	61	3	43	0	64	112	1082	65	1147
13:15 to 14:15	34	14	29	0	48	45	4	37	0	49	97	1138	70	1208
13:30 to 14:30	37	15	28	0	52	47	4	35	0	51	103	1168	66	1234
13:45 to 14:45	41	13	25	0	54	43	5	33	0	48	102	1289	64	1353
14:00 to 15:00	40	5	20	0	45	40	5	33	0	45	90	1324	61	1385
14:15 to 15:15	43	4	19	0	47	36	5	35	0	41	88	1344	60	1404
14:30 to 15:30	46	2	13	0	48	38	4	38	0	42	90	1330	54	1384
14:45 to 15:45	43	2	14	0	45	46	3	32	0	49	94	1332	51	1383
15:00 to 16:00	48	1	15	0	49	46	1	28	0	47	96	1350	51	1401
15:15 to 16:15	53	4	16	0	57	54	2	24	0	56	113	1315	44	1359
15:30 to 16:30	48	5	17	0	53	54	4	20	0	58	111	1375	38	1413
15:45 to 16:45	55	7	16	0	62	52	7	20	0	59	121	1398	35	1433
16:00 to 17:00	57	7	16	0	64	60	8	21	0	68	132	1459	31	1490
16:15 to 17:15	58	4	12	0	62	54	6	20	0	60	122	1484	30	1514
16:30 to 17:30	62	4	11	0	66	65	4	17	0	69	135	1490	30	1520
16:45 to 17:45	58	2	12	0	60	63	3	20	0	66	126	1510	27	1537
17:00 to 18:00	54	3	9	0	57	53	3	15	0	56	113	1535	19	1554
17:15 to 18:15	47	4	13	0	51	57	5	14	0	62	113	1589	11	1600
17:30 to 18:30	46	3	16	0	49	44	5	19	0	49	98	1586	9	1595
17:45 to 18:45	43	4	18	0	47	46	4	15	0	50	97	1579	8	1587
18:00 to 19:00	40	3	25	0	43	47	3	25	0	50	93	1483	13	1496

Table 3.7 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Tuesday 21/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food			light	heavy	fast food						
AM														
11:30 to 12:30	71	4	20	0	75	70	6	24	0	76	151	1115	65	1180
PM														
12:15 to 13:15	59	3	36	0	62	76	4	31	0	80	142	1165	60	1225

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food			light	heavy	fast food						
AM														
7:15 to 8:15	39	5	18	0	44	40	7	19	0	47	91	1573	91	1664
PM														
17:15 to 18:15	47	4	13	0	51	57	5	14	0	62	113	1589	11	1600

Table 3.8 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Tuesday 21/05/2013.

Tue 21/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	45	11	12	1	57	46	10	11	1	57	114	1431	92	1523
7:00 to 8:00	48	6	19	0	54	48	7	20	0	55	109	1479	109	1588
8:00 to 9:00	56	7	13	0	63	50	8	14	0	58	121	1508	42	1550
9:00 to 10:00	55	5	13	1	61	55	5	14	1	61	122	1487	59	1546
10:00 to 11:00	62	6	23	0	68	56	6	21	0	62	130	1098	72	1170
11:00 to 12:00	60	6	22	0	66	69	6	23	0	75	141	1037	68	1105
12:00 to 13:00	68	4	30	0	72	63	5	28	0	68	140	1158	61	1219
13:00 to 14:00	36	12	39	0	48	61	3	43	0	64	112	1082	65	1147
14:00 to 15:00	40	5	20	0	45	40	5	33	0	45	90	1324	61	1385
15:00 to 16:00	48	1	15	0	49	46	1	28	0	47	96	1350	51	1401
16:00 to 17:00	57	7	16	0	64	60	8	21	0	68	132	1459	31	1490
17:00 to 18:00	54	3	9	0	57	53	3	15	0	56	113	1535	19	1554
18:00 to 19:00	40	3	25	0	43	47	3	25	0	50	93	1483	13	1496
Total	669	76	256	2	747	694	70	296	2	766	1513	17431	743	18174

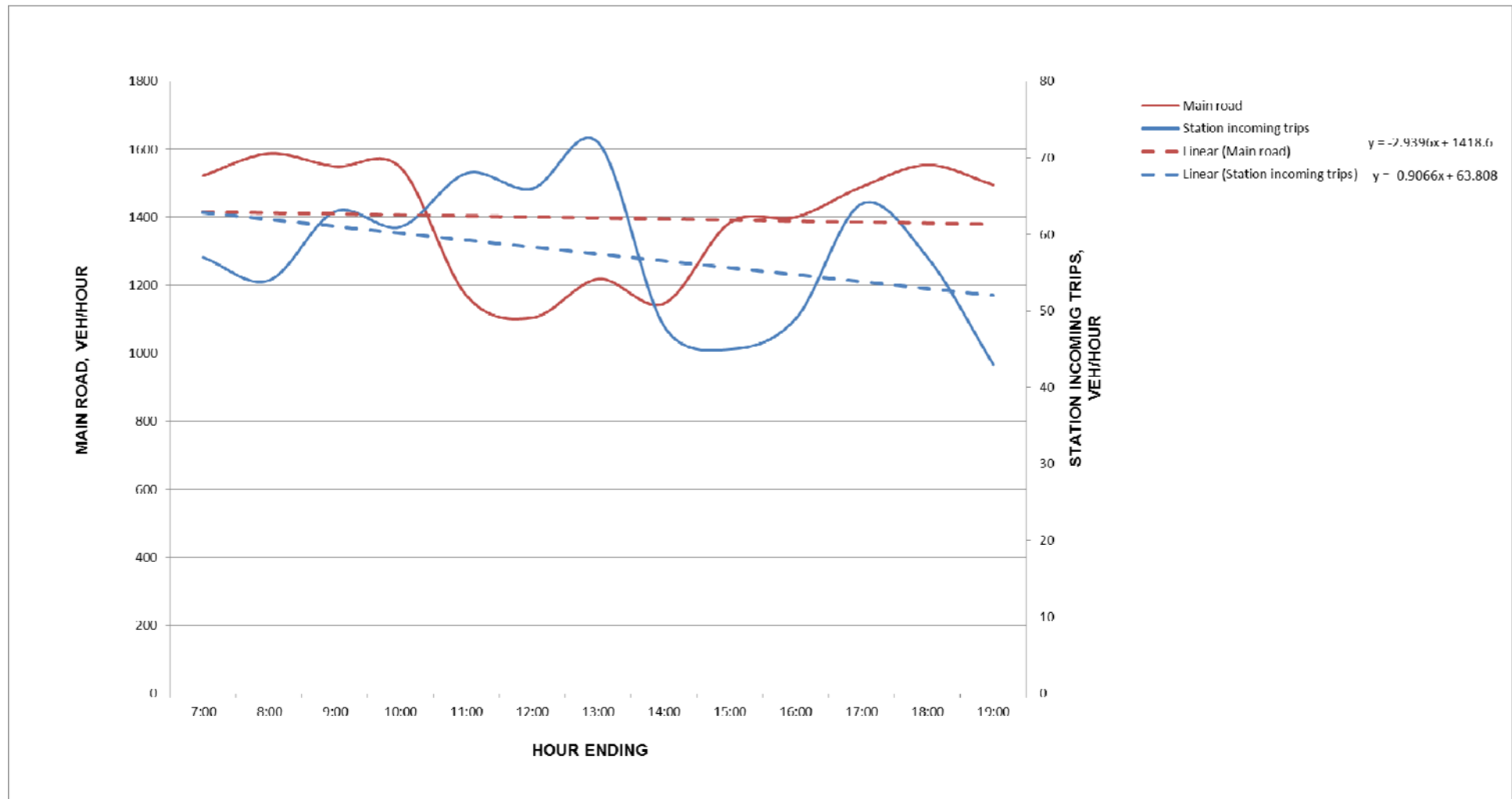


Figure 3.23 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Tuesday 21/05/2013.

Table 3.9 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Wednesday 22/05/2013.

Wed 22/05/13			Coles Express, South Dowling St, Waterloo								Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price	
15 minute Data			Vehicles									15 minute Data	15 minute Data		15 minute Data			15 minute Data	
WEATHER Fine	IN					OUT													
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total									
	light	heavy	fast food			light	heavy	fast food											
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10	
6:00 to 6:15	13	1	2	1	15	11	2	3	0	13	28	295	18	313	6	0	6	147.9	
6:15 to 6:30	13	3	5	0	16	12	2	7	0	14	30	363	19	382	6	0	6	147.9	
6:30 to 6:45	4	1	2	0	5	7	2	1	1	10	15	409	17	426	6	0	6	147.9	
6:45 to 7:00	15	3	7	0	18	16	3	7	0	19	37	395	27	422	6	0	6	147.9	
7:00 to 7:15	9	1	8	0	10	10	1	8	0	11	21	416	22	438	6	0	6	147.9	
7:15 to 7:30	11	0	3	0	11	11	10	2	0	21	32	385	20	405	6	0	6	147.9	
7:30 to 7:45	7	1	2	0	8	6	0	3	0	6	14	467	23	490	6	0	6	147.9	
7:45 to 8:00	15	2	4	0	17	14	2	5	0	16	33	350	23	373	6	0	6	147.9	
8:00 to 8:15	8	0	1	0	8	9	1	1	0	10	18	239	14	253	6	0	6	147.9	
8:15 to 8:30	11	1	2	0	12	11	0	1	0	11	23	405	17	422	6	0	6	147.9	
8:30 to 8:45	17	2	6	0	19	18	1	6	0	19	38	410	22	432	6	1	7	147.9	
8:45 to 9:00	15	2	5	0	17	14	1	4	0	15	32	340	23	363	8	0	8	147.9	
9:00 to 9:15	13	3	4	0	16	14	2	4	0	16	32	325	28	353	10	0	10	147.9	
9:15 to 9:30	11	2	2	0	13	12	1	3	0	13	26	370	21	391	8	0	8	147.9	
9:30 to 9:45	8	1	2	0	9	9	1	1	0	10	19	373	20	393	7	1	8	147.9	
9:45 to 10:00	13	2	5	2	17	15	2	5	0	17	34	368	26	394	8	0	8	147.9	
10:00 to 10:15	15	1	4	1	17	14	1	1	1	16	33	311	31	342	8	0	8	147.9	
10:15 to 10:30	11	2	2	0	13	11	3	5	1	15	28	294	25	319	9	0	9	147.9	
10:30 to 10:45	14	0	5	0	14	14	0	5	0	14	28	293	8	301	9	0	9	147.9	
10:45 to 11:00	16	2	5	0	18	17	2	1	0	19	37	237	15	252	8	1	9	147.9	
11:00 to 11:15	9	1	2	0	10	12	2	1	0	14	24	265	11	276	9	1	10	147.9	
11:15 to 11:30	10	0	4	0	10	1	1	2	0	2	12	288	11	299	9	0	9	147.9	
11:30 to 11:45	16	0	5	0	16	14	0	6	0	14	30	271	16	287	10	0	10	147.9	
11:45 to 12:00	10	1	2	0	11	15	0	3	1	16	27	251	15	266	8	0	8	147.9	
12:00 to 12:15	12	1	7	0	13	13	1	5	0	14	27	262	7	269	10	0	10	147.9	
12:15 to 12:30	12	1	4	0	13	19	2	8	0	21	34	288	11	299	6	1	7	147.9	
12:30 to 12:45	8	2	7	0	10	10	3	4	0	13	23	279	12	291	16	0	16	147.9	
12:45 to 13:00	7	2	7	0	9	10	1	13	0	11	20	267	12	279	11	0	11	147.9	
13:00 to 13:15	6	2	9	0	8	6	2	7	0	8	16	255	9	264	17	0	17	147.9	
13:15 to 13:30	7	1	4	0	8	8	1	9	0	9	17	260	15	275	12	0	12	147.9	
13:30 to 13:45	12	1	9	0	13	9	2	5	0	11	24	205	12	217	14	0	14	147.9	
13:45 to 14:00	7	0	4	0	7	7	0	9	0	7	14	258	9	267	11	0	11	147.9	
14:00 to 14:15	13	3	4	0	16	10	1	7	0	11	27	281	16	297	14	3	17	147.9	
14:15 to 14:30	7	4	8	0	11	8	4	7	0	12	23	264	11	275	17	0	17	147.9	
14:30 to 14:45	6	1	4	0	7	7	0	5	0	7	14	293	9	302	16	1	17	147.9	
14:45 to 15:00	5	1	2	0	6	8	2	12	0	10	16	282	10	292	8	0	8	147.9	
15:00 to 15:15	14	2	5	0	16	13	1	4	0	14	30	309	14	323	9	1	10	147.9	
15:15 to 15:30	7	1	7	0	8	8	3	6	0	11	19	344	11	355	13	1	14	147.9	
15:30 to 15:45	13	0	5	0	13	11	1	5	0	12	25	334	7	341	10	0	10	147.9	
15:45 to 16:00	11	2	9	0	13	11	1	9	0	12	25	333	7	340	11	0	11	147.9	
16:00 to 16:15	13	1	4	0	14	8	1	8	0	9	23	370	3	373	10	0	10	147.9	
16:15 to 16:30	12	2	4	0	14	15	0	5	0	15	29	338	6	344	10	0	10	147.9	
16:30 to 16:45	11	2	0	0	13	11	1	3	0	12	25	348	3	351	8	0	8	147.9	
16:45 to 17:00	12	0	6	0	12	1	2	1	0	3	15	374	3	377	13	0	13	147.9	
17:00 to 17:15	7	1	2	0	8	11	1	5	0	12	20	360	5	365	14	0	14	147.9	
17:15 to 17:30	14	0	2	0	14	13	0	10	0	13	27	365	5	370	11	0	11	147.9	
17:30 to 17:45	7	0	6	0	7	10	0	5	0	10	17	374	6	380	9	0	9	147.9	
17:45 to 18:00	12	0	0	0	12	11	0	5	0	11	23	398	4	402	10	0	10	147.9	
18:00 to 18:15	3	1	3	0	4	6	1	7	0	7	11	334	4	338	6	0	6	147.9	
18:15 to 18:30	13	0	4	0	13	11	0	3	0	11	24	357	7	364	9	0	9	147.9	
18:30 to 18:45	9	0	3	0	9	10	0	9	0	10	19	334	3	337	5	0	5	147.9	
18:45 to 19:00	13	0	2	0	13	8	0	3	0	8	21	360	8	368	6	0	6	147.9	
TOTAL	557	63	220	4	624	560	71		4	635	1259	16946	701	17647					

Table 3.10 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Wednesday 22/05/2013.

Wed 22/05/13 1-hour Data		Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data	
	IN					OUT						LV	HV		
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total					
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles		Vehicles		
6:00 to 7:00	45	8	16	1	54	46	9	18	1	56	110	1462	81	1543	
6:15 to 7:15	41	8	22	0	49	45	8	23	1	54	103	1583	85	1668	
6:30 to 7:30	39	5	20	0	44	44	16	18	1	61	105	1605	86	1691	
6:45 to 7:45	42	5	20	0	47	43	14	20	0	57	104	1663	92	1755	
7:00 to 8:00	42	4	17	0	46	41	13	18	0	54	100	1618	88	1706	
7:15 to 8:15	41	3	10	0	44	40	13	11	0	53	97	1441	80	1521	
7:30 to 8:30	41	4	9	0	45	40	3	10	0	43	88	1461	77	1538	
7:45 to 8:45	51	5	13	0	56	52	4	13	0	56	112	1404	76	1480	
8:00 to 9:00	51	5	14	0	56	52	3	12	0	55	111	1394	76	1470	
8:15 to 9:15	56	8	17	0	64	57	4	15	0	61	125	1480	90	1570	
8:30 to 9:30	56	9	17	0	65	58	5	17	0	63	128	1445	94	1539	
8:45 to 9:45	47	8	13	0	55	49	5	12	0	54	109	1408	92	1500	
9:00 to 10:00	45	8	13	2	55	50	6	13	0	56	111	1436	95	1531	
9:15 to 10:15	47	6	13	3	56	50	5	10	1	56	112	1422	98	1520	
9:30 to 10:30	47	6	13	3	56	49	7	12	2	58	114	1346	102	1448	
9:45 to 10:45	53	5	16	3	61	54	6	16	2	62	123	1266	90	1356	
10:00 to 11:00	56	5	16	1	62	56	6	12	2	64	126	1135	79	1214	
10:15 to 11:15	50	5	14	0	55	54	7	12	1	62	117	1089	59	1148	
10:30 to 11:30	49	3	16	0	52	44	5	9	0	49	101	1083	45	1128	
10:45 to 11:45	51	3	16	0	54	44	5	10	0	49	103	1061	53	1114	
11:00 to 12:00	45	2	13	0	47	42	3	12	1	46	93	1075	53	1128	
11:15 to 12:15	48	2	18	0	50	43	2	16	1	46	96	1072	49	1121	
11:30 to 12:30	50	3	18	0	53	61	3	22	1	65	118	1072	49	1121	
11:45 to 12:45	42	5	20	0	47	57	6	20	1	64	111	1080	45	1125	
12:00 to 13:00	39	6	25	0	45	52	7	30	0	59	104	1096	42	1138	
12:15 to 13:15	33	7	27	0	40	45	8	32	0	53	93	1089	44	1133	
12:30 to 13:30	28	7	27	0	35	34	7	33	0	41	76	1061	48	1109	
12:45 to 13:45	32	6	29	0	38	33	6	34	0	39	77	987	48	1035	
13:00 to 14:00	32	4	26	0	36	30	5	30	0	35	71	978	45	1023	
13:15 to 14:15	39	5	21	0	44	34	4	30	0	38	82	1004	52	1056	
13:30 to 14:30	39	8	25	0	47	34	7	28	0	41	88	1008	48	1056	
13:45 to 14:45	33	8	20	0	41	32	5	28	0	37	78	1096	45	1141	
14:00 to 15:00	31	9	18	0	40	33	7	31	0	40	80	1120	46	1166	
14:15 to 15:15	32	8	19	0	40	36	7	28	0	43	83	1148	44	1192	
14:30 to 15:30	32	5	18	0	37	36	6	27	0	42	79	1228	44	1272	
14:45 to 15:45	39	4	19	0	43	40	7	27	0	47	90	1269	42	1311	
15:00 to 16:00	45	5	26	0	50	43	6	24	0	49	99	1320	39	1359	
15:15 to 16:15	44	4	25	0	48	38	6	28	0	44	92	1381	28	1409	
15:30 to 16:30	49	5	22	0	54	45	3	27	0	48	102	1375	23	1398	
15:45 to 16:45	47	7	17	0	54	45	3	25	0	48	102	1389	19	1408	
16:00 to 17:00	48	5	14	0	53	35	4	17	0	39	92	1430	15	1445	
16:15 to 17:15	42	5	12	0	47	38	4	14	0	42	89	1420	17	1437	
16:30 to 17:30	44	3	10	0	47	36	4	19	0	40	87	1447	16	1463	
16:45 to 17:45	40	1	16	0	41	35	3	21	0	38	79	1473	19	1492	
17:00 to 18:00	40	1	10	0	41	45	1	25	0	46	87	1497	20	1517	
17:15 to 18:15	36	1	11	0	37	40	1	27	0	41	78	1471	19	1490	
17:30 to 18:30	35	1	13	0	36	38	1	20	0	39	75	1463	21	1484	
17:45 to 18:45	37	1	10	0	38	38	1	24	0	39	77	1423	18	1441	
18:00 to 19:00	38	1	12	0	39	35	1	22	0	36	75	1385	22	1407	

Table 3.11 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Wednesday 22/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
8:30 to 9:30	56	9	17	0	65	58	5	17	0	63	128	1445	94	1539
PM														
12:00 to 13:00	39	6	25	0	45	52	7	30	0	59	104	1096	42	1138

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:45 to 7:45	42	5	20	0	47	43	14	20	0	57	104	1663	92	1755
PM														
17:00 to 18:00	40	1	10	0	41	45	1	25	0	46	87	1497	20	1517

Table 3.12 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Wednesday 22/05/2013.

Wed 22/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	45	8	16	1	54	46	9	18	1	56	110	1462	81	1543
7:00 to 8:00	42	4	17	0	46	41	13	18	0	54	100	1618	88	1706
8:00 to 9:00	51	5	14	0	56	52	3	12	0	55	111	1394	76	1470
9:00 to 10:00	45	8	13	2	55	50	6	13	0	56	111	1436	95	1531
10:00 to 11:00	56	5	16	1	62	56	6	12	2	64	126	1135	79	1214
11:00 to 12:00	45	2	13	0	47	42	3	12	1	46	93	1075	53	1128
12:00 to 13:00	39	6	25	0	45	52	7	30	0	59	104	1096	42	1138
13:00 to 14:00	32	4	26	0	36	30	5	30	0	35	71	978	45	1023
14:00 to 15:00	31	9	18	0	40	33	7	31	0	40	80	1120	46	1166
15:00 to 16:00	45	5	26	0	50	43	6	24	0	49	99	1320	39	1359
16:00 to 17:00	48	5	14	0	53	35	4	17	0	39	92	1430	15	1445
17:00 to 18:00	40	1	10	0	41	45	1	25	0	46	87	1497	20	1517
18:00 to 19:00	38	1	12	0	39	35	1	22	0	36	75	1385	22	1407
Total	557	63	220	4	624	560	71	264	4	635	1259	16946	701	17647

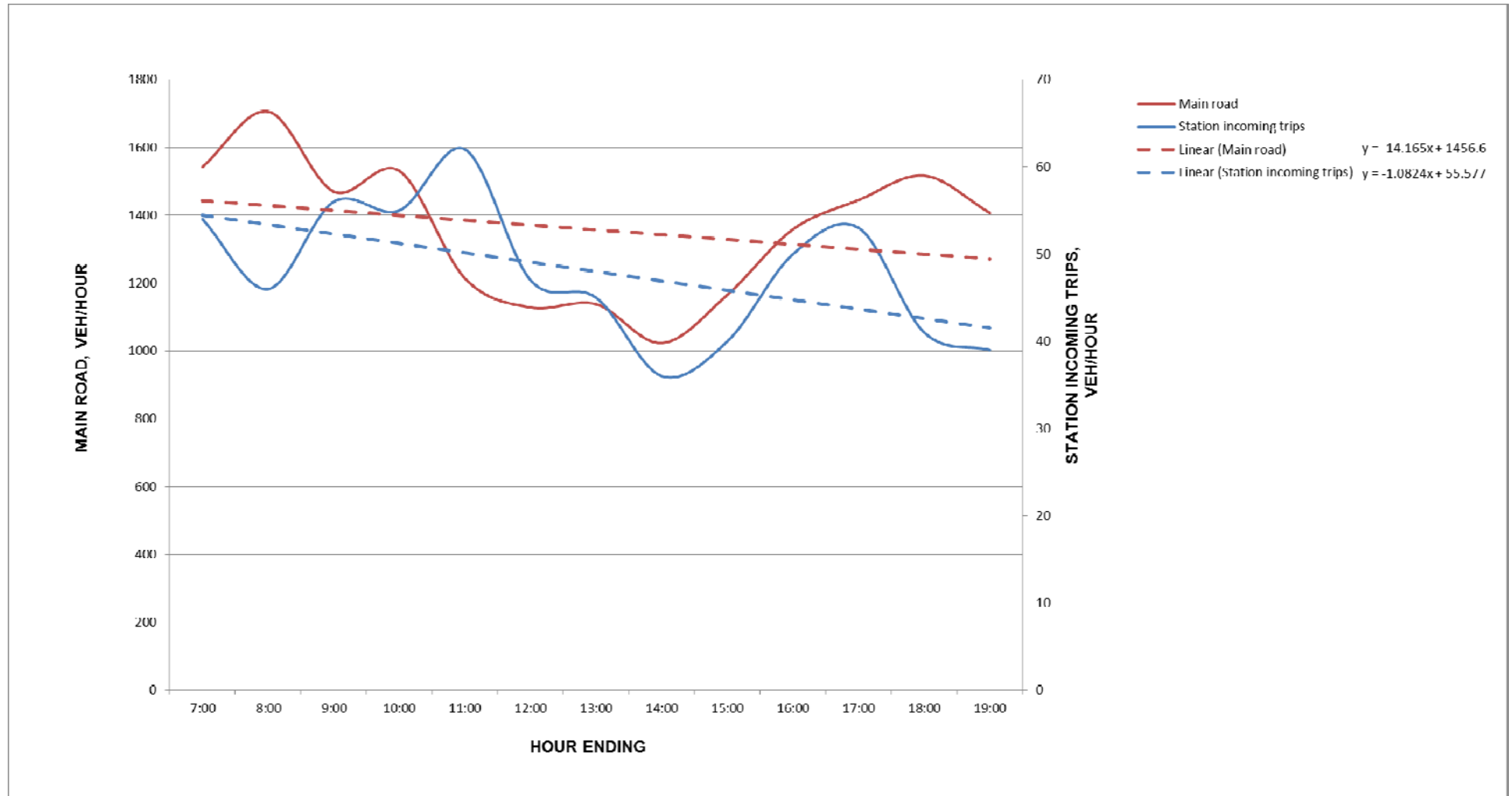


Figure 3.24 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Wednesday 22/05/2013.

Table 3.13 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Thursday 23/05/2013.

Thu 23/05/13			Coles Express, South Dowling St, Waterloo									Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price	
15 minute Data			Vehicles										15 minute Data	15 minute Data		15 minute Data			15 minute Data	
WEATHER Fine	IN					OUT														
	Customer vehicles			Service/Delivery		Customer vehicles			Service/Delivery											
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total										
6:00	to	6:15	17	0	9	0	17	17	2	6	0	19	36	274	15	289	4	10	14	147.9
6:15	to	6:30	8	0	2	0	8	9	0	2	0	9	17	352	15	367	3	0	3	147.9
6:30	to	6:45	7	3	3	1	11	8	2	5	0	10	21	416	12	428	3	0	3	147.9
6:45	to	7:00	14	7	10	1	22	13	5	10	2	20	42	342	12	354	3	1	4	147.9
7:00	to	7:15	13	1	3	0	14	12	4	1	0	16	30	385	14	399	4	0	4	147.9
7:15	to	7:30	18	2	6	0	20	17	2	5	0	19	39	394	18	412	4	0	4	147.9
7:30	to	7:45	6	0	2	0	6	11	0	6	0	11	17	442	18	460	4	0	4	147.9
7:45	to	8:00	9	1	4	0	10	5	0	6	0	5	15	371	8	379	5	0	5	147.9
8:00	to	8:15	20	0	7	0	20	14	1	4	0	15	35	378	17	395	5	0	5	147.9
8:15	to	8:30	12	2	4	0	14	15	1	5	0	16	30	339	14	353	5	0	5	147.9
8:30	to	8:45	9	1	1	0	10	10	1	2	0	11	21	400	21	421	4	0	4	147.9
8:45	to	9:00	8	1	2	0	9	10	1	1	0	11	20	396	8	404	4	0	4	147.9
9:00	to	9:15	10	1	2	0	11	13	2	0	0	15	26	337	18	355	4	0	4	147.9
9:15	to	9:30	11	1	3	0	12	11	0	1	0	11	23	364	26	390	4	0	4	147.9
9:30	to	9:45	15	1	2	1	17	13	1	0	0	14	31	363	21	384	4	0	4	147.9
9:45	to	10:00	16	0	4	0	16	13	0	5	0	13	29	395	22	417	6	0	6	147.9
10:00	to	10:15	17	1	4	0	18	19	0	3	0	19	37	311	19	330	5	0	5	147.9
10:15	to	10:30	15	3	2	0	18	16	3	2	1	20	38	328	22	350	7	0	7	147.9
10:30	to	10:45	14	1	7	1	16	16	1	7	1	18	34	326	24	350	7	0	7	147.9
10:45	to	11:00	10	0	3	0	10	12	1	4	0	13	23	271	25	296	7	0	7	147.9
11:00	to	11:15	11	1	4	0	12	12	1	4	0	13	25	273	10	283	8	0	8	147.9
11:15	to	11:30	16	0	5	0	16	14	0	5	0	14	30	280	16	296	9	1	10	147.9
11:30	to	11:45	15	3	6	0	18	16	2	6	0	18	36	275	14	289	6	1	7	147.9
11:45	to	12:00	10	4	4	1	15	10	1	5	0	11	26	258	17	275	8	0	8	147.9
12:00	to	12:15	19	2	2	0	21	19	4	2	0	23	44	255	14	269	6	0	6	147.9
12:15	to	12:30	15	1	4	0	16	16	1	3	0	17	33	230	12	242	8	0	8	147.9
12:30	to	12:45	12	2	5	0	14	12	2	5	1	15	29	267	23	290	14	0	14	147.9
12:45	to	13:00	6	1	10	1	8	8	1	9	0	9	17	241	15	256	15	1	16	147.9
13:00	to	13:15	5	1	7	0	6	9	0	5	1	10	16	236	18	254	21	1	22	147.9
13:15	to	13:30	14	1	5	0	15	7	2	9	0	9	24	211	12	223	18	1	19	147.9
13:30	to	13:45	9	1	4	0	10	9	2	7	0	11	21	237	20	257	15	0	15	147.9
13:45	to	14:00	12	1	6	0	13	13	0	4	0	13	26	245	17	262	17	1	18	147.9
14:00	to	14:15	6	2	6	1	9	8	3	12	0	11	20	283	14	297	15	0	15	147.9
14:15	to	14:30	11	0	0	0	11	10	0	4	1	11	22	258	10	268	13	0	13	147.9
14:30	to	14:45	15	1	4	0	16	17	0	3	0	17	33	291	9	300	10	0	10	147.9
14:45	to	15:00	9	0	2	0	9	11	2	4	0	13	22	259	10	269	9	0	9	147.9
15:00	to	15:15	13	0	6	0	13	9	1	8	0	10	23	255	13	268	10	0	10	147.9
15:15	to	15:30	8	2	3	0	10	11	2	5	0	13	23	380	16	396	8	0	8	147.9
15:30	to	15:45	14	3	3	0	17	11	3	5	0	14	31	353	13	366	11	0	11	147.9
15:45	to	16:00	8	1	4	0	9	8	0	4	0	8	17	393	6	399	13	0	13	147.9
16:00	to	16:15	7	2	8	0	9	6	2	11	0	8	17	365	9	374	16	0	16	147.9
16:15	to	16:30	11	1	7	0	12	13	3	5	0	16	28	397	12	409	15	0	15	147.9
16:30	to	16:45	7	0	4	0	7	10	1	8	0	11	18	365	9	374	13	0	13	147.9
16:45	to	17:00	14	0	2	0	14	12	0	3	0	12	26	409	4	413	13	0	13	147.9
17:00	to	17:15	16	0	2	0	16	14	0	3	0	14	30	400	5	405	17	0	17	147.9
17:15	to	17:30	5	0	6	0	5	9	0	11	0	9	14	357	4	361	11	0	11	147.9
17:30	to	17:45	8	0	5	0	8	8	0	4	0	8	16	375	4	379	13	0	13	147.9
17:45	to	18:00	9	0	4	1	10	10	0	6	1	11	21	410	4	414	12	0	12	147.9
18:00	to	18:15	13	1	2	0	14	10	1	8	0	11	25	358	5	363	6	0	6	147.9
18:15	to	18:30	9	0	5	0	9	8	0	1	0	8	17	353	4	357	9	0	9	147.9
18:30	to	18:45	10	0	5	0	10	11	0	4	0	11	21	339	4	343	11	0	11	147.9
18:45	to	19:00	10	0	5	0	10	15	0	9	0	15	25	358	2	360	7	0	7	147.9
TOTAL			596	57	225	8	661	610	61		8	679	1340	17150	694		17844			

Table 3.14 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Thursday 23/05/2013.

Thu 23/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT								
	Customer vehicles					Customer vehicles								
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
6:00 to 7:00	46	10	24	2	58	47	9	23	2	58	116	1384	54	1438
6:15 to 7:15	42	11	18	2	55	42	11	18	2	55	110	1495	53	1548
6:30 to 7:30	52	13	22	2	67	50	13	21	2	65	132	1537	56	1593
6:45 to 7:45	51	10	21	1	62	53	11	22	2	66	128	1563	62	1625
7:00 to 8:00	46	4	15	0	50	45	6	18	0	51	101	1592	58	1650
7:15 to 8:15	53	3	19	0	56	47	3	21	0	50	106	1585	61	1646
7:30 to 8:30	47	3	17	0	50	45	2	21	0	47	97	1530	57	1587
7:45 to 8:45	50	4	16	0	54	44	3	17	0	47	101	1488	60	1548
8:00 to 9:00	49	4	14	0	53	49	4	12	0	53	106	1513	60	1573
8:15 to 9:15	39	5	9	0	44	48	5	8	0	53	97	1472	61	1533
8:30 to 9:30	38	4	8	0	42	44	4	4	0	48	90	1497	73	1570
8:45 to 9:45	44	4	9	1	49	47	4	2	0	51	100	1460	73	1533
9:00 to 10:00	52	3	11	1	56	50	3	6	0	53	109	1459	87	1546
9:15 to 10:15	59	3	13	1	63	56	1	9	0	57	120	1433	88	1521
9:30 to 10:30	63	5	12	1	69	61	4	10	1	66	135	1397	84	1481
9:45 to 10:45	62	5	17	1	68	64	4	17	2	70	138	1360	87	1447
10:00 to 11:00	56	5	16	1	62	63	5	16	2	70	132	1236	90	1326
10:15 to 11:15	50	5	16	1	56	56	6	17	2	64	120	1198	81	1279
10:30 to 11:30	51	2	19	1	54	54	3	20	1	58	112	1150	75	1225
10:45 to 11:45	52	4	18	0	56	54	4	19	0	58	114	1099	65	1164
11:00 to 12:00	52	8	19	1	61	52	4	20	0	56	117	1086	57	1143
11:15 to 12:15	60	9	17	1	70	59	7	18	0	66	136	1068	61	1129
11:30 to 12:30	59	10	16	1	70	61	8	16	0	69	139	1018	57	1075
11:45 to 12:45	56	9	15	1	66	57	8	15	1	66	132	1010	66	1076
12:00 to 13:00	52	6	21	1	59	55	8	19	1	64	123	993	64	1057
12:15 to 13:15	38	5	26	1	44	45	4	22	2	51	95	974	68	1042
12:30 to 13:30	37	5	27	1	43	36	5	28	2	43	86	955	68	1023
12:45 to 13:45	34	4	26	1	39	33	5	30	1	39	78	925	65	990
13:00 to 14:00	40	4	22	0	44	38	4	25	1	43	87	929	67	996
13:15 to 14:15	41	5	21	1	47	37	7	32	0	44	91	976	63	1039
13:30 to 14:30	38	4	16	1	43	40	5	27	1	46	89	1023	61	1084
13:45 to 14:45	44	4	16	1	49	48	3	23	1	52	101	1077	50	1127
14:00 to 15:00	41	3	12	1	45	46	5	23	1	52	97	1091	43	1134
14:15 to 15:15	48	1	12	0	49	47	3	19	1	51	100	1063	42	1105
14:30 to 15:30	45	3	15	0	48	48	5	20	0	53	101	1185	48	1233
14:45 to 15:45	44	5	14	0	49	42	8	22	0	50	99	1247	52	1299
15:00 to 16:00	43	6	16	0	49	39	6	22	0	45	94	1381	48	1429
15:15 to 16:15	37	8	18	0	45	36	7	25	0	43	88	1491	44	1535
15:30 to 16:30	40	7	22	0	47	38	8	25	0	46	93	1508	40	1548
15:45 to 16:45	33	4	23	0	37	37	6	28	0	43	80	1520	36	1556
16:00 to 17:00	39	3	21	0	42	41	6	27	0	47	89	1536	34	1570
16:15 to 17:15	48	1	15	0	49	49	4	19	0	53	102	1571	30	1601
16:30 to 17:30	42	0	14	0	42	45	1	25	0	46	88	1531	22	1553
16:45 to 17:45	43	0	15	0	43	43	0	21	0	43	86	1541	17	1558
17:00 to 18:00	38	0	17	1	39	41	0	24	1	42	81	1542	17	1559
17:15 to 18:15	35	1	17	1	37	37	1	29	1	39	76	1500	17	1517
17:30 to 18:30	39	1	16	1	41	36	1	19	1	38	79	1496	17	1513
17:45 to 18:45	41	1	16	1	43	39	1	19	1	41	84	1460	17	1477
18:00 to 19:00	42	1	17	0	43	44	1	22	0	45	88	1408	15	1423

Table 3.15 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Thursday 23/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:30 to 12:30	59	10	16	1	70	61	8	16	0	69	139	1018	57	1075
PM														
12:00 to 13:00	52	6	21	1	59	55	8	19	1	64	123	993	64	1057

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
7:00 to 8:00	46	4	15	0	50	45	6	18	0	51	101	1592	58	1650
PM														
16:15 to 17:15	48	1	15	0	49	49	4	19	0	53	102	1571	30	1601

Table 3.16 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Thursday 23/05/2013.

Thu 23/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	46	10	24	2	58	47	9	23	2	58	116	1384	54	1438
7:00 to 8:00	46	4	15	0	50	45	6	18	0	51	101	1592	58	1650
8:00 to 9:00	49	4	14	0	53	49	4	12	0	53	106	1513	60	1573
9:00 to 10:00	52	3	11	1	56	50	3	6	0	53	109	1459	87	1546
10:00 to 11:00	56	5	16	1	62	63	5	16	2	70	132	1236	90	1326
11:00 to 12:00	52	8	19	1	61	52	4	20	0	56	117	1086	57	1143
12:00 to 13:00	52	6	21	1	59	55	8	19	1	64	123	993	64	1057
13:00 to 14:00	40	4	22	0	44	38	4	25	1	43	87	929	67	996
14:00 to 15:00	41	3	12	1	45	46	5	23	1	52	97	1091	43	1134
15:00 to 16:00	43	6	16	0	49	39	6	22	0	45	94	1381	48	1429
16:00 to 17:00	39	3	21	0	42	41	6	27	0	47	89	1536	34	1570
17:00 to 18:00	38	0	17	1	39	41	0	24	1	42	81	1542	17	1559
18:00 to 19:00	42	1	17	0	43	44	1	22	0	45	88	1408	15	1423
Total	596	57	225	8	661	610	61	257	8	679	1340	17150	694	17844

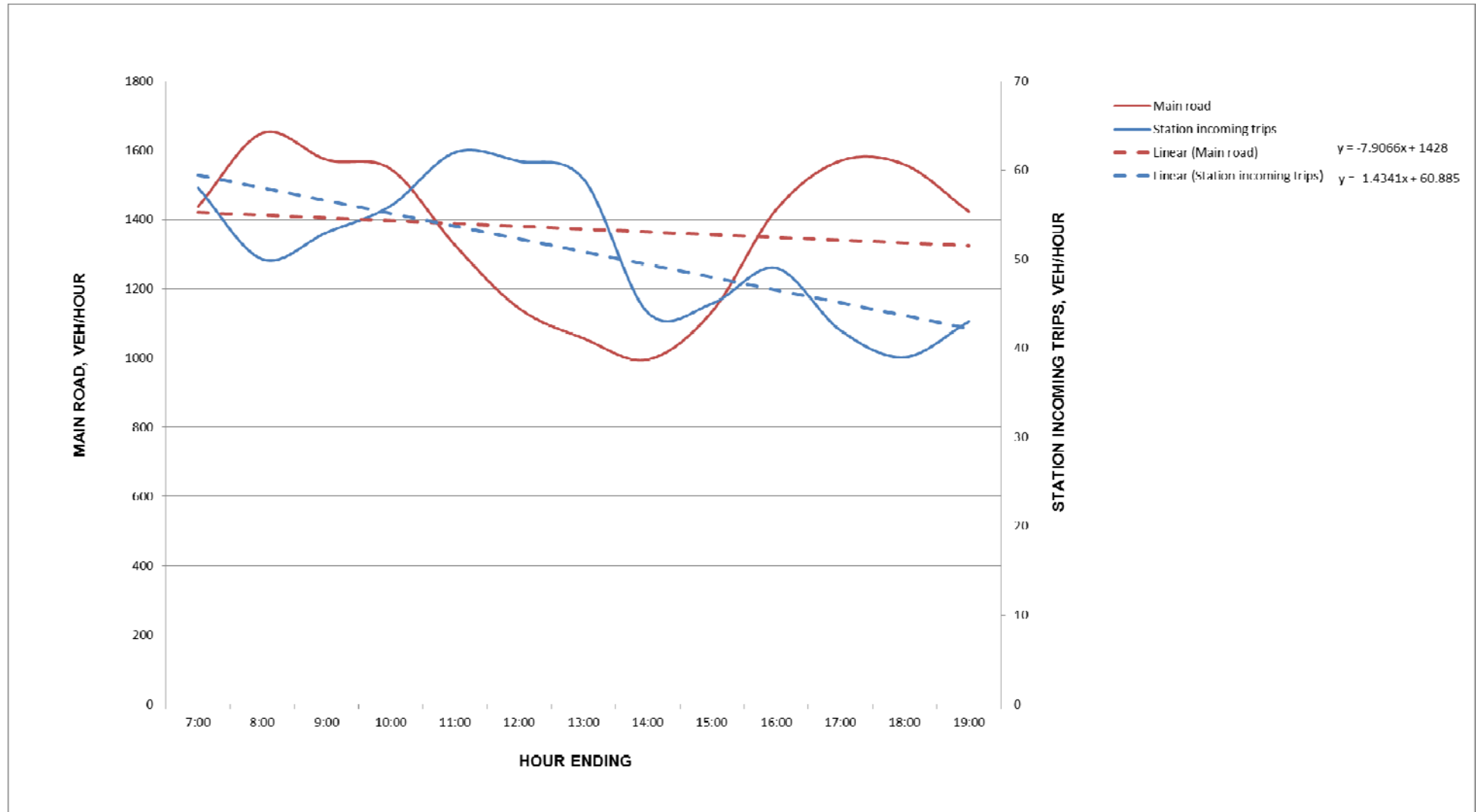


Figure 3.25 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Thursday 23/05/2013.

Table 3.17 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Friday 17/05/2013.

Fri 17/05/13 15 minute Data	Coles Express, South Dowling St, Waterloo											Grandtotal - site 15 minute Data	Main Road Data		Grandtotal - Main Road 15 minute Data	On-site parking demand 15 minute Data			Petrol price 15 minute Data E10
	Vehicles												15 minute Data			15 minute Data			
	IN					OUT							15 minute Data			15 minute Data			
	Customer vehicles					Customer vehicles							15 minute Data			15 minute Data			
WEATHER Fine	TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	
6:00 to 6:15	11	3	7	1	15	10	2	5	0	12	27	321	16	337	337	6	0	6	133.9
6:15 to 6:30	12	3	8	0	15	13	4	8	1	18	33	361	26	387	387	6	1	7	133.9
6:30 to 6:45	12	3	4	0	15	11	1	5	0	12	27	403	25	428	428	6	0	6	133.9
6:45 to 7:00	11	2	3	0	13	12	3	2	0	15	28	406	25	431	431	7	0	7	133.9
7:00 to 7:15	9	2	2	0	11	7	3	2	0	10	21	332	31	363	363	6	0	6	133.9
7:15 to 7:30	18	0	4	0	18	16	0	3	0	16	34	412	28	440	440	7	0	7	133.9
7:30 to 7:45	10	1	1	0	11	11	0	1	0	11	22	418	30	448	448	7	1	8	133.9
7:45 to 8:00	12	1	2	0	13	10	1	1	0	11	24	411	19	430	430	8	0	8	133.9
8:00 to 8:15	12	3	3	0	15	11	1	3	0	12	27	378	24	402	402	9	0	9	133.9
8:15 to 8:30	17	0	3	0	17	19	2	2	0	21	38	429	22	451	451	7	0	7	133.9
8:30 to 8:45	10	0	2	0	10	12	1	3	0	13	23	343	21	364	364	8	0	8	133.9
8:45 to 9:00	11	0	1	0	11	10	1	2	0	11	22	385	26	411	411	8	0	8	133.9
9:00 to 9:15	12	0	2	0	12	12	0	1	0	12	24	399	19	418	418	9	0	9	133.9
9:15 to 9:30	15	1	2	0	16	13	0	2	0	13	29	408	31	439	439	9	0	9	133.9
9:30 to 9:45	14	1	3	0	15	15	2	2	0	17	32	362	27	389	389	8	1	9	133.9
9:45 to 10:00	16	0	2	0	16	14	0	3	0	14	30	418	24	442	442	8	0	8	133.9
10:00 to 10:15	10	0	1	0	10	12	0	1	0	12	22	301	35	336	336	6	0	6	133.9
10:15 to 10:30	9	0	2	0	9	9	0	0	0	9	18	299	18	317	317	6	1	7	133.9
10:30 to 10:45	16	2	3	1	19	13	2	3	0	15	34	323	25	348	348	7	0	7	133.9
10:45 to 11:00	12	2	1	0	14	11	0	0	0	11	25	300	24	324	324	9	1	10	133.9
11:00 to 11:15	13	4	1	0	17	12	3	0	0	15	32	328	23	351	351	10	2	12	133.9
11:15 to 11:30	21	2	1	0	23	20	2	2	0	22	45	266	21	287	287	13	1	14	133.9
11:30 to 11:45	14	2	2	0	16	13	0	2	0	13	29	290	24	314	314	13	0	13	133.9
11:45 to 12:00	15	0	3	0	15	16	2	2	0	18	33	294	21	315	315	11	0	11	133.9
12:00 to 12:15	23	1	2	0	24	20	0	3	0	20	44	310	10	320	320	14	1	15	133.9
12:15 to 12:30	22	4	2	1	27	20	2	2	0	22	49	279	20	299	299	20	1	21	133.9
12:30 to 12:45	24	0	3	0	24	25	1	2	1	27	51	305	19	324	324	19	1	20	133.9
12:45 to 13:00	14	0	1	0	14	13	0	2	1	14	28	284	27	311	311	20	0	20	133.9
13:00 to 13:15	18	2	3	0	20	15	0	2	1	16	36	283	19	302	302	16	1	17	133.9
13:15 to 13:30	19	2	4	0	21	22	1	3	0	23	44	308	17	325	325	12	0	12	133.9
13:30 to 13:45	20	1	5	0	21	23	1	5	0	24	45	249	23	272	272	13	0	13	133.9
13:45 to 14:00	19	2	3	0	21	21	1	4	0	22	43	278	22	300	300	9	0	9	133.9
14:00 to 14:15	21	0	4	0	21	8	1	3	0	9	30	316	23	339	339	11	0	11	130.9
14:15 to 14:30	17	2	2	0	19	19	2	2	0	21	40	300	12	312	312	14	0	14	130.9
14:30 to 14:45	25	1	4	0	26	24	1	4	0	25	51	365	12	377	377	12	0	12	130.9
14:45 to 15:00	8	0	2	0	8	13	0	2	0	13	21	334	17	351	351	8	0	8	130.9
15:00 to 15:15	16	2	3	0	18	18	0	3	0	18	36	336	19	355	355	6	0	6	130.9
15:15 to 15:30	18	1	4	0	19	9	2	4	0	11	30	405	17	422	422	5	0	5	130.9
15:30 to 15:45	20	1	5	0	21	16	2	5	0	18	39	394	9	403	403	6	0	6	130.9
15:45 to 16:00	22	1	8	0	23	24	1	8	0	25	48	349	12	361	361	5	0	5	130.9
16:00 to 16:15	27	0	8	0	27	28	0	8	0	28	55	358	7	365	365	6	0	6	130.9
16:15 to 16:30	12	0	6	0	12	22	0	6	0	22	34	361	8	369	369	5	0	5	130.9
16:30 to 16:45	26	0	10	0	26	19	0	10	0	19	45	407	4	411	411	7	0	7	130.9
16:45 to 17:00	10	1	2	0	11	16	1	2	0	17	28	357	5	362	362	6	0	6	130.9
17:00 to 17:15	21	2	4	0	23	20	2	4	0	22	45	440	12	452	452	5	0	5	130.9
17:15 to 17:30	15	1	4	0	16	12	0	4	0	12	28	392	12	404	404	4	1	5	130.9
17:30 to 17:45	17	0	6	0	17	14	0	6	0	14	31	440	5	445	445	5	1	6	130.9
17:45 to 18:00	21	0	4	0	21	23	1	4	0	24	45	440	4	444	444	5	0	5	130.9
18:00 to 18:15	14	1	3	0	15	15	1	3	0	16	31	392	5	397	397	4	0	4	130.9
18:15 to 18:30	16	0	4	0	16	14	0	4	0	14	30	430	1	431	431	4	0	4	130.9
18:30 to 18:45	12	0	4	0	12	14	0	4	0	14	26	387	5	392	392	4	0	4	130.9
18:45 to 19:00	8	0	2	0	8	8	0	2	0	8	16	377	2	379	379	4	0	4	130.9
TOTAL	817	57	175	3	877	797	50		4	851	1728	18463	933		19396				

Table 3.18 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Friday 17/05/2013.

Fri 17/05/13 1-hour Data		Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine		Vehicles										1-hour Data	1-hour Data		1-hour Data
		IN					OUT								
		Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total				
TIME	light	heavy	fast food	light			heavy	fast food							
6:00	to 7:00	46	11	22	1	58	46	10	20	1	57	115	1491	92	1583
6:15	to 7:15	44	10	17	0	54	43	11	17	1	55	109	1502	107	1609
6:30	to 7:30	50	7	13	0	57	46	7	12	0	53	110	1553	109	1662
6:45	to 7:45	48	5	10	0	53	46	6	8	0	52	105	1568	114	1682
7:00	to 8:00	49	4	9	0	53	44	4	7	0	48	101	1573	108	1681
7:15	to 8:15	52	5	10	0	57	48	2	8	0	50	107	1619	101	1720
7:30	to 8:30	51	5	9	0	56	51	4	7	0	55	111	1636	95	1731
7:45	to 8:45	51	4	10	0	55	52	5	9	0	57	112	1561	86	1647
8:00	to 9:00	50	3	9	0	53	52	5	10	0	57	110	1535	93	1628
8:15	to 9:15	50	0	8	0	50	53	4	8	0	57	107	1556	88	1644
8:30	to 9:30	48	1	7	0	49	47	2	8	0	49	98	1535	97	1632
8:45	to 9:45	52	2	8	0	54	50	3	7	0	53	107	1554	103	1657
9:00	to 10:00	57	2	9	0	59	54	2	8	0	56	115	1587	101	1688
9:15	to 10:15	55	2	8	0	57	54	2	8	0	56	113	1489	117	1606
9:30	to 10:30	49	1	8	0	50	50	2	6	0	52	102	1380	104	1484
9:45	to 10:45	51	2	8	1	54	48	2	7	0	50	104	1341	102	1443
10:00	to 11:00	47	4	7	1	52	45	2	4	0	47	99	1223	102	1325
10:15	to 11:15	50	8	7	1	59	45	5	3	0	50	109	1250	90	1340
10:30	to 11:30	62	10	6	1	73	56	7	5	0	63	136	1217	93	1310
10:45	to 11:45	60	10	5	0	70	56	5	4	0	61	131	1184	92	1276
11:00	to 12:00	63	8	7	0	71	61	7	6	0	68	139	1178	89	1267
11:15	to 12:15	73	5	8	0	78	69	4	9	0	73	151	1160	76	1236
11:30	to 12:30	74	7	9	1	82	69	4	9	0	73	155	1173	75	1248
11:45	to 12:45	84	5	10	1	90	81	5	9	1	87	177	1188	70	1258
12:00	to 13:00	83	5	8	1	89	78	3	9	2	83	172	1178	76	1254
12:15	to 13:15	78	6	9	1	85	73	3	8	3	79	164	1151	85	1236
12:30	to 13:30	75	4	11	0	79	75	2	9	3	80	159	1180	82	1262
12:45	to 13:45	71	5	13	0	76	73	2	12	2	77	153	1124	86	1210
13:00	to 14:00	76	7	15	0	83	81	3	14	1	85	168	1118	81	1199
13:15	to 14:15	79	5	16	0	84	74	4	15	0	78	162	1151	85	1236
13:30	to 14:30	77	5	14	0	82	71	5	14	0	76	158	1143	80	1223
13:45	to 14:45	82	5	13	0	87	72	5	13	0	77	164	1259	69	1328
14:00	to 15:00	71	3	12	0	74	64	4	11	0	68	142	1315	64	1379
14:15	to 15:15	66	5	11	0	71	74	3	11	0	77	148	1335	60	1395
14:30	to 15:30	67	4	13	0	71	64	3	13	0	67	138	1440	65	1505
14:45	to 15:45	62	4	14	0	66	56	4	14	0	60	126	1469	62	1531
15:00	to 16:00	76	5	20	0	81	67	5	20	0	72	153	1484	57	1541
15:15	to 16:15	87	3	25	0	90	77	5	25	0	82	172	1506	45	1551
15:30	to 16:30	81	2	27	0	83	90	3	27	0	93	176	1462	36	1498
15:45	to 16:45	87	1	32	0	88	93	1	32	0	94	182	1475	31	1506
16:00	to 17:00	75	1	26	0	76	85	1	26	0	86	162	1483	24	1507
16:15	to 17:15	69	3	22	0	72	77	3	22	0	80	152	1565	29	1594
16:30	to 17:30	72	4	20	0	76	67	3	20	0	70	146	1596	33	1629
16:45	to 17:45	63	4	16	0	67	62	3	16	0	65	132	1629	34	1663
17:00	to 18:00	74	3	18	0	77	69	3	18	0	72	149	1712	33	1745
17:15	to 18:15	67	2	17	0	69	64	2	17	0	66	135	1664	26	1690
17:30	to 18:30	68	1	17	0	69	66	2	17	0	68	137	1702	15	1717
17:45	to 18:45	63	1	15	0	64	66	2	15	0	68	132	1649	15	1664
18:00	to 19:00	50	1	13	0	51	51	1	13	0	52	103	1586	13	1599

Table 3.19 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Friday 17/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:45 to 12:45	84	5	10	1	90	81	5	9	1	87	177	1188	70	1258
PM														
15:45 to 16:45	87	1	32	0	88	93	1	32	0	94	182	1475	31	1506

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
7:30 to 8:30	51	5	9	0	56	51	4	7	0	55	111	1636	95	1731
PM														
17:00 to 18:00	74	3	18	0	77	69	3	18	0	72	149	1712	33	1745

Table 3.20 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Friday 17/05/2013.

Fri 17/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	46	11	22	1	58	46	10	20	1	57	115	1491	92	1583
7:00 to 8:00	49	4	9	0	53	44	4	7	0	48	101	1573	108	1681
8:00 to 9:00	50	3	9	0	53	52	5	10	0	57	110	1535	93	1628
9:00 to 10:00	57	2	9	0	59	54	2	8	0	56	115	1587	101	1688
10:00 to 11:00	47	4	7	1	52	45	2	4	0	47	99	1223	102	1325
11:00 to 12:00	63	8	7	0	71	61	7	6	0	68	139	1178	89	1267
12:00 to 13:00	83	5	8	1	89	78	3	9	2	83	172	1178	76	1254
13:00 to 14:00	76	7	15	0	83	81	3	14	1	85	168	1118	81	1199
14:00 to 15:00	71	3	12	0	74	64	4	11	0	68	142	1315	64	1379
15:00 to 16:00	76	5	20	0	81	67	5	20	0	72	153	1484	57	1541
16:00 to 17:00	75	1	26	0	76	85	1	26	0	86	162	1483	24	1507
17:00 to 18:00	74	3	18	0	77	69	3	18	0	72	149	1712	33	1745
18:00 to 19:00	50	1	13	0	51	51	1	13	0	52	103	1586	13	1599
Total	817	57	175	3	877	797	50	166	4	851	1728	18463	933	19396

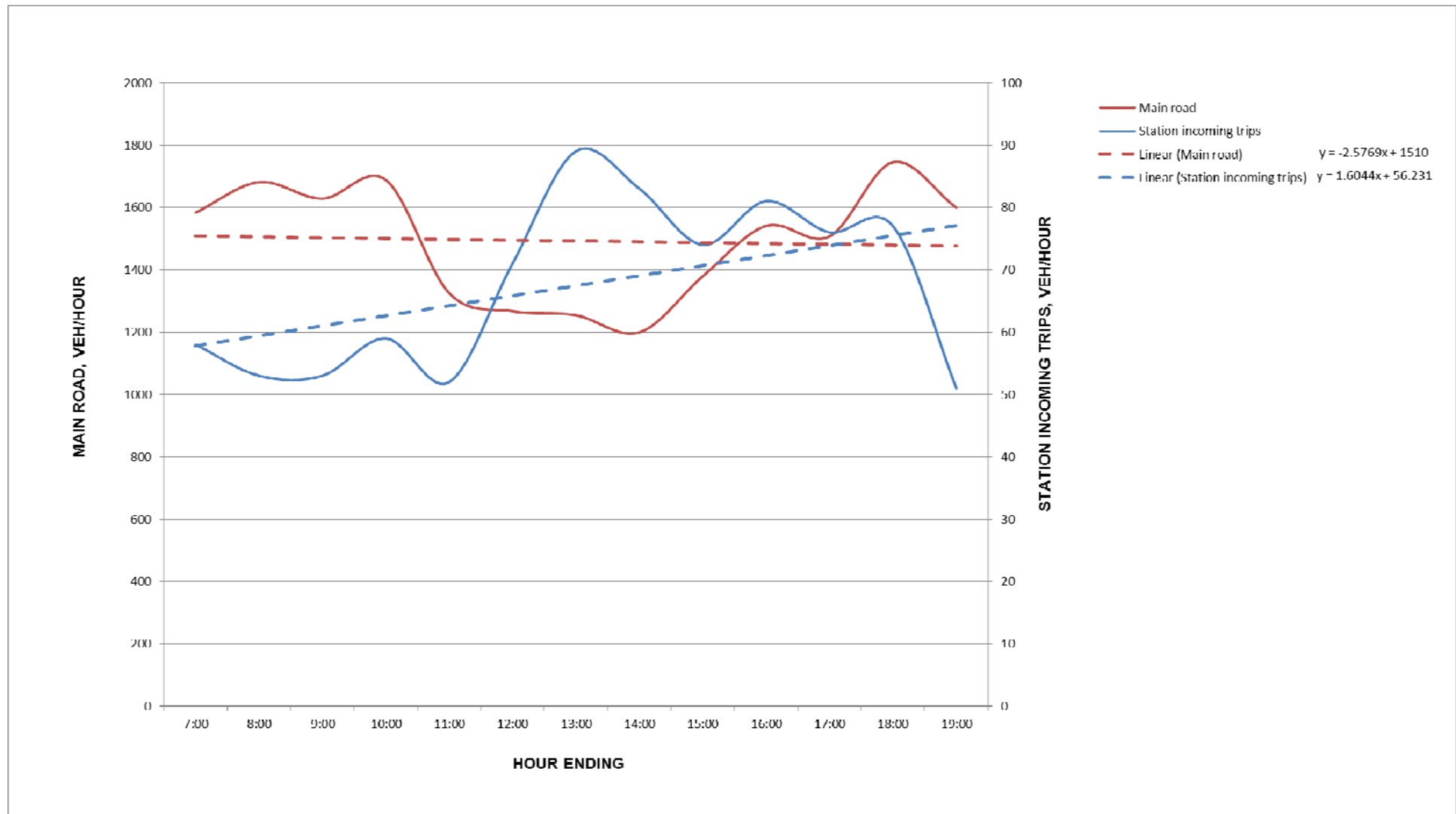


Figure 3.26 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Friday 17/05/2013.

Table 3.21 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Saturday 18/05/2013.

Sat 18/05/13			Coles Express, South Dowling St, Waterloo										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price	
15 minute Data			Vehicles											15 minute Data	15 minute Data		15 minute Data			15 minute Data	
WEATHER Fine	IN					OUT															
	Customer vehicles			Service/Delivery		Customer vehicles			Service/Delivery												
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total											
TIME												Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10		
6:00 to 6:15	13	3	7	1	17	9	2	2	0	11	28	134	11	145	7	1	8	130.9			
6:15 to 6:30	14	1	4	1	16	10	1	5	0	11	27	192	14	206	7	0	7	130.9			
6:30 to 6:45	11	1	5	0	12	11	0	3	0	11	23	212	8	220	7	0	7	130.9			
6:45 to 7:00	8	0	2	0	8	10	1	4	1	12	20	231	14	245	7	0	7	130.9			
7:00 to 7:15	9	1	3	0	10	10	1	3	0	11	21	192	15	207	9	1	10	130.9			
7:15 to 7:30	12	0	4	0	12	12	1	2	0	13	25	203	17	220	10	0	10	130.9			
7:30 to 7:45	9	3	1	0	12	7	2	4	0	9	21	267	12	279	14	0	14	130.9			
7:45 to 8:00	7	0	2	0	7	12	1	2	0	13	20	223	17	240	8	0	8	130.9			
8:00 to 8:15	10	2	2	0	12	10	2	1	0	12	24	229	10	239	8	0	8	130.9			
8:15 to 8:30	10	1	3	0	11	8	1	3	0	9	20	285	19	304	6	0	6	130.9			
8:30 to 8:45	14	1	2	0	15	17	1	4	0	18	33	309	14	323	7	1	8	130.9			
8:45 to 9:00	11	1	3	0	12	14	0	3	0	14	26	310	13	323	6	0	6	130.9			
9:00 to 9:15	10	0	5	0	10	11	0	2	0	11	21	356	19	375	6	0	6	130.9			
9:15 to 9:30	20	1	8	0	21	18	1	6	0	19	40	322	16	338	6	0	6	130.9			
9:30 to 9:45	19	0	3	0	19	22	0	6	0	22	41	383	15	398	4	0	4	130.9			
9:45 to 10:00	15	0	2	0	15	14	0	3	0	14	29	353	12	365	4	0	4	130.9			
10:00 to 10:15	22	0	4	0	22	19	0	1	0	19	41	329	13	342	8	0	8	130.9			
10:15 to 10:30	17	1	3	0	18	18	1	5	0	19	37	327	11	338	8	0	8	130.9			
10:30 to 10:45	15	0	2	0	15	12	0	2	0	12	27	338	12	350	8	0	8	130.9			
10:45 to 11:00	15	0	3	0	15	16	0	2	0	16	31	340	11	351	6	0	6	130.9			
11:00 to 11:15	18	0	2	0	18	19	0	4	0	19	37	321	4	325	7	1	8	130.9			
11:15 to 11:30	18	0	1	0	18	16	0	0	0	16	34	321	11	332	10	0	10	130.9			
11:30 to 11:45	20	1	4	0	21	21	0	3	0	21	42	336	4	340	6	0	6	130.9			
11:45 to 12:00	18	0	2	0	18	15	1	2	0	16	34	329	6	335	8	0	8	130.9			
12:00 to 12:15	33	3	3	0	36	27	3	3	0	30	66	301	11	312	7	0	7	130.9			
12:15 to 12:30	25	1	5	0	26	29	1	5	0	30	56	274	3	277	7	0	7	130.9			
12:30 to 12:45	15	1	6	0	16	16	1	7	0	17	33	319	8	327	6	0	6	130.9			
12:45 to 13:00	16	1	5	0	17	12	1	5	0	13	30	314	8	322	6	0	6	130.9			
13:00 to 13:15	17	0	12	0	17	22	0	12	0	22	39	322	7	329	10	0	10	130.9			
13:15 to 13:30	32	2	14	0	34	26	2	14	0	28	62	314	11	325	11	0	11	130.9			
13:30 to 13:45	28	1	11	0	29	32	1	11	0	33	62	345	7	352	8	0	8	130.9			
13:45 to 14:00	17	2	9	0	19	23	0	9	0	23	42	290	9	299	4	0	4	130.9			
14:00 to 14:15	31	0	12	0	31	25	1	12	0	26	57	340	8	348	10	0	10	130.9			
14:15 to 14:30	14	0	6	0	14	21	1	6	0	22	36	277	8	285	5	0	5	130.9			
14:30 to 14:45	22	2	8	0	24	16	1	8	0	17	41	339	10	349	4	0	4	130.9			
14:45 to 15:00	19	1	10	0	20	18	1	10	0	19	39	331	5	336	7	1	8	130.9			
15:00 to 15:15	21	0	8	0	21	22	1	8	0	23	44	338	7	345	4	0	4	130.9			
15:15 to 15:30	26	2	8	0	28	21	0	8	0	21	49	308	6	314	8	0	8	130.9			
15:30 to 15:45	21	1	7	0	22	24	1	7	0	25	47	340	13	353	7	0	7	130.9			
15:45 to 16:00	31	1	9	0	32	18	1	9	0	19	51	313	8	321	10	0	10	130.9			
16:00 to 16:15	15	1	8	0	16	27	1	8	0	28	44	245	1	246	8	0	8	130.9			
16:15 to 16:30	18	0	10	0	18	19	0	10	0	19	37	285	9	294	8	0	8	130.9			
16:30 to 16:45	20	0	8	0	20	21	0	8	0	21	41	344	8	352	4	0	4	130.9			
16:45 to 17:00	26	0	8	0	26	22	0	8	0	22	48	299	5	304	6	0	6	130.9			
17:00 to 17:15	19	0	7	0	19	22	0	7	0	22	41	334	5	339	3	0	3	130.9			
17:15 to 17:30	26	0	9	0	26	15	0	9	0	15	41	333	3	336	4	0	4	130.9			
17:30 to 17:45	21	2	10	0	23	28	0	10	0	28	51	284	2	286	7	2	9	130.9			
17:45 to 18:00	16	0	6	0	16	17	1	6	0	18	34	287	3	290	8	1	9	130.9			
18:00 to 18:15	17	0	7	0	17	22	0	7	0	22	39	260	5	265	9	0	9	130.9			
18:15 to 18:30	16	0	5	0	16	12	0	5	0	12	28	298	3	301	10	0	10	130.9			
18:30 to 18:45	21	0	5	0	21	16	1	5	0	17	38	276	5	281	6	0	6	130.9			
18:45 to 19:00	14	0	6	0	14	21	0	6	0	21	35	279	3	282	7	0	7	130.9			
TOTAL	932	38	299	2	972	925	35		1	961	1933	15431	479	15910							

Table 3.22 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Saturday 18/05/2013.

Sat 18/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo											Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles											1-hour Data	1-hour Data		1-hour Data
	IN					OUT									
	Customer vehicles					Customer vehicles			Service/Delivery				LV	HV	
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles			Vehicles	
6:00 to 7:00	46	5	18	2	53	40	4	14	1	45	98	769	47	816	
6:15 to 7:15	42	3	14	1	46	41	3	15	1	45	91	827	51	878	
6:30 to 7:30	40	2	14	0	42	43	3	12	1	47	89	838	54	892	
6:45 to 7:45	38	4	10	0	42	39	5	13	1	45	87	893	58	951	
7:00 to 8:00	37	4	10	0	41	41	5	11	0	46	87	885	61	946	
7:15 to 8:15	38	5	9	0	43	41	6	9	0	47	90	922	56	978	
7:30 to 8:30	36	6	8	0	42	37	6	10	0	43	85	1004	58	1062	
7:45 to 8:45	41	4	9	0	45	47	5	10	0	52	97	1046	60	1106	
8:00 to 9:00	45	5	10	0	50	49	4	11	0	53	103	1133	56	1189	
8:15 to 9:15	45	3	13	0	48	50	2	12	0	52	100	1260	65	1325	
8:30 to 9:30	55	3	18	0	58	60	2	15	0	62	120	1297	62	1359	
8:45 to 9:45	60	2	19	0	62	65	1	17	0	66	128	1371	63	1434	
9:00 to 10:00	64	1	18	0	65	65	1	17	0	66	131	1414	62	1476	
9:15 to 10:15	76	1	17	0	77	73	1	16	0	74	151	1387	56	1443	
9:30 to 10:30	73	1	12	0	74	73	1	15	0	74	148	1392	51	1443	
9:45 to 10:45	69	1	11	0	70	63	1	11	0	64	134	1347	48	1395	
10:00 to 11:00	69	1	12	0	70	65	1	10	0	66	136	1334	47	1381	
10:15 to 11:15	65	1	10	0	66	65	1	13	0	66	132	1326	38	1364	
10:30 to 11:30	66	0	8	0	66	63	0	8	0	63	129	1320	38	1358	
10:45 to 11:45	71	1	10	0	72	72	0	9	0	72	144	1318	30	1348	
11:00 to 12:00	74	1	9	0	75	71	1	9	0	72	147	1307	25	1332	
11:15 to 12:15	89	4	10	0	93	79	4	8	0	83	176	1287	32	1319	
11:30 to 12:30	96	5	14	0	101	92	5	13	0	97	198	1240	24	1264	
11:45 to 12:45	91	5	16	0	96	87	6	17	0	93	189	1223	28	1251	
12:00 to 13:00	89	6	19	0	95	84	6	20	0	90	185	1208	30	1238	
12:15 to 13:15	73	3	28	0	76	79	3	29	0	82	158	1229	26	1255	
12:30 to 13:30	80	4	37	0	84	76	4	38	0	80	164	1269	34	1303	
12:45 to 13:45	93	4	42	0	97	92	4	42	0	96	193	1295	33	1328	
13:00 to 14:00	94	5	46	0	99	103	3	46	0	106	205	1271	34	1305	
13:15 to 14:15	108	5	46	0	113	106	4	46	0	110	223	1289	35	1324	
13:30 to 14:30	90	3	38	0	93	101	3	38	0	104	197	1252	32	1284	
13:45 to 14:45	84	4	35	0	88	85	3	35	0	88	176	1246	35	1281	
14:00 to 15:00	86	3	36	0	89	80	4	36	0	84	173	1287	31	1318	
14:15 to 15:15	76	3	32	0	79	77	4	32	0	81	160	1285	30	1315	
14:30 to 15:30	88	5	34	0	93	77	3	34	0	80	173	1316	28	1344	
14:45 to 15:45	87	4	33	0	91	85	3	33	0	88	179	1317	31	1348	
15:00 to 16:00	99	4	32	0	103	85	3	32	0	88	191	1299	34	1333	
15:15 to 16:15	93	5	32	0	98	90	3	32	0	93	191	1206	28	1234	
15:30 to 16:30	85	3	34	0	88	88	3	34	0	91	179	1183	31	1214	
15:45 to 16:45	84	2	35	0	86	85	2	35	0	87	173	1187	26	1213	
16:00 to 17:00	79	1	34	0	80	89	1	34	0	90	170	1173	23	1196	
16:15 to 17:15	83	0	33	0	83	84	0	33	0	84	167	1262	27	1289	
16:30 to 17:30	91	0	32	0	91	80	0	32	0	80	171	1310	21	1331	
16:45 to 17:45	92	2	34	0	94	87	0	34	0	87	181	1250	15	1265	
17:00 to 18:00	82	2	32	0	84	82	1	32	0	83	167	1238	13	1251	
17:15 to 18:15	80	2	32	0	82	82	1	32	0	83	165	1164	13	1177	
17:30 to 18:30	70	2	28	0	72	79	1	28	0	80	152	1129	13	1142	
17:45 to 18:45	70	0	23	0	70	67	2	23	0	69	139	1121	16	1137	
18:00 to 19:00	68	0	23	0	68	71	1	23	0	72	140	1113	16	1129	

Table 3.23 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Saturday 18/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:30 to 12:30	96	5	14	0	101	92	5	13	0	97	198	1240	24	1264
PM														
13:15 to 14:15	108	5	46	0	113	106	4	46	0	110	223	1289	35	1324

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
9:00 to 10:00	64	1	18	0	65	65	1	17	0	66	131	1414	62	1476
PM														
14:45 to 15:45	87	4	33	0	91	85	3	33	0	88	179	1317	31	1348

Table 3.24 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Saturday 18/05/2013.

Sat 18/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	46	5	18	2	53	40	4	14	1	45	98	769	47	816
7:00 to 8:00	37	4	10	0	41	41	5	11	0	46	87	885	61	946
8:00 to 9:00	45	5	10	0	50	49	4	11	0	53	103	1133	56	1189
9:00 to 10:00	64	1	18	0	65	65	1	17	0	66	131	1414	62	1476
10:00 to 11:00	69	1	12	0	70	65	1	10	0	66	136	1334	47	1381
11:00 to 12:00	74	1	9	0	75	71	1	9	0	72	147	1307	25	1332
12:00 to 13:00	89	6	19	0	95	84	6	20	0	90	185	1208	30	1238
13:00 to 14:00	94	5	46	0	99	103	3	46	0	106	205	1271	34	1305
14:00 to 15:00	86	3	36	0	89	80	4	36	0	84	173	1287	31	1318
15:00 to 16:00	99	4	32	0	103	85	3	32	0	88	191	1299	34	1333
16:00 to 17:00	79	1	34	0	80	89	1	34	0	90	170	1173	23	1196
17:00 to 18:00	82	2	32	0	84	82	1	32	0	83	167	1238	13	1251
18:00 to 19:00	68	0	23	0	68	71	1	23	0	72	140	1113	16	1129
Total	932	38	299	2	972	925	35	295	1	961	1933	15431	479	15910

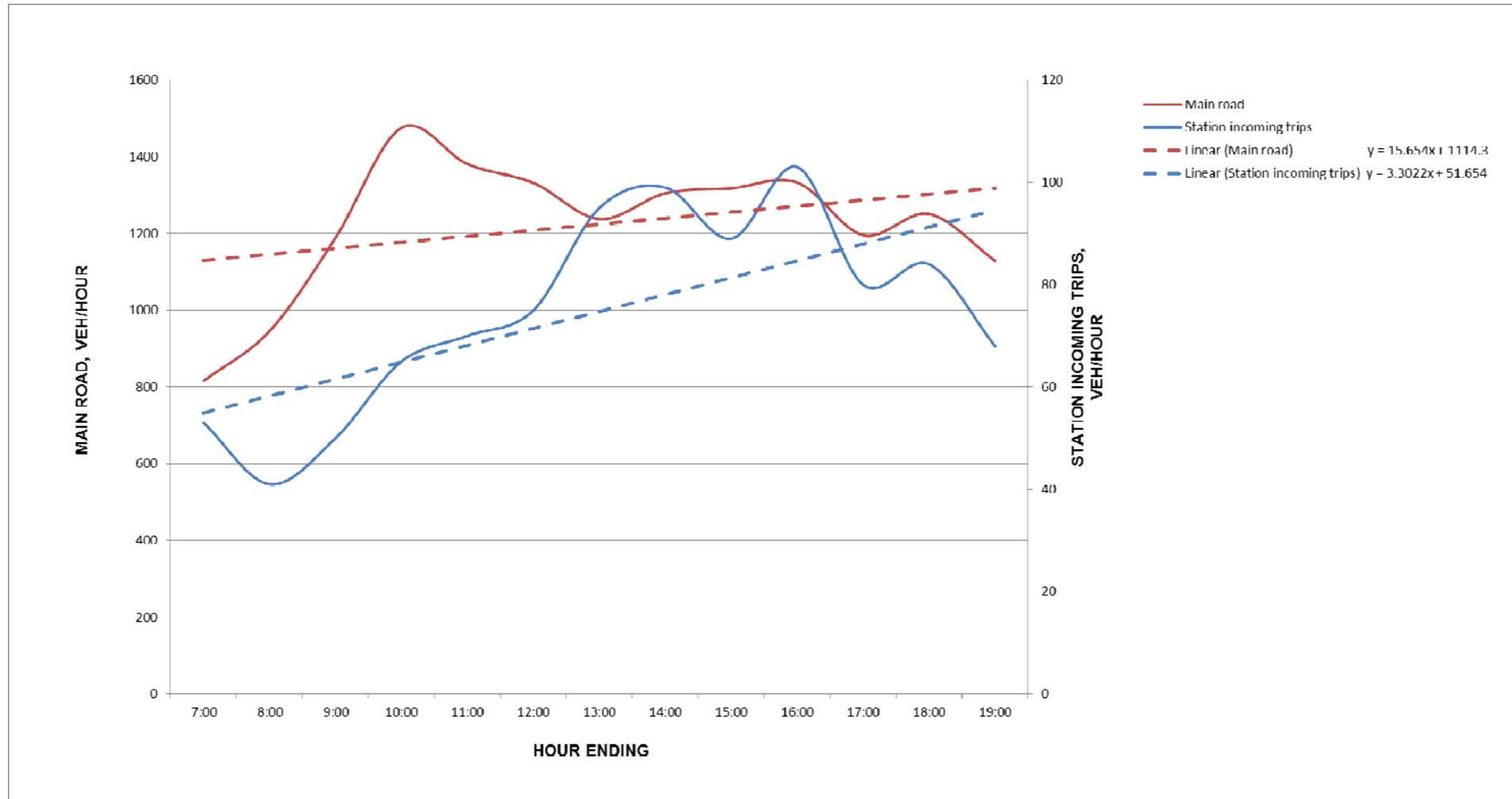


Figure 3.27 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Saturday 18/05/2013.

Table 3.25 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – 15-minute interval data – Sunday 19/05/2013.

Sun 19/05/13	Coles Express, South Dowling St, Waterloo										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
15 minute Data	Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
WEATHER Fine	IN					OUT						LV	HV		Formal	Informal	Total	
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total								
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles			Vehicles				E10
6:00 to 6:15	11	1	4	1	13	9	0	3	0	9	22	107	8	115	4	0	4	130.9
6:15 to 6:30	10	0	7	0	10	12	0	4	0	12	22	110	6	116	4	0	4	130.9
6:30 to 6:45	6	1	3	0	7	5	1	3	0	6	13	107	3	110	4	0	4	130.9
6:45 to 7:00	7	0	5	0	7	7	0	4	0	7	14	92	7	99	5	0	5	130.9
7:00 to 7:15	10	0	3	0	10	11	1	3	1	13	23	103	2	105	4	0	4	130.9
7:15 to 7:30	6	0	3	0	6	5	0	3	0	5	11	122	3	125	4	0	4	130.9
7:30 to 7:45	9	0	1	0	9	8	0	1	0	8	17	140	15	155	4	0	4	130.9
7:45 to 8:00	4	0	1	0	4	6	0	3	0	6	10	122	1	123	4	0	4	130.9
8:00 to 8:15	6	0	2	0	6	4	0	0	0	4	10	167	4	171	4	0	4	130.9
8:15 to 8:30	8	0	2	0	8	11	0	2	0	11	19	179	7	186	4	0	4	130.9
8:30 to 8:45	15	0	3	0	15	13	0	2	0	13	28	222	6	228	6	0	6	130.9
8:45 to 9:00	15	0	4	0	15	15	0	2	0	15	30	212	5	217	5	0	5	130.9
9:00 to 9:15	19	0	6	0	19	18	0	3	0	18	37	268	4	272	6	0	6	130.9
9:15 to 9:30	25	0	3	0	25	23	0	5	0	23	48	257	9	266	5	0	5	130.9
9:30 to 9:45	13	0	4	0	13	14	0	3	0	14	27	297	4	301	4	0	4	130.9
9:45 to 10:00	8	0	3	0	8	8	0	3	0	8	16	316	5	321	4	0	4	130.9
10:00 to 10:15	18	0	2	0	18	16	0	4	0	16	34	309	6	315	5	0	5	130.9
10:15 to 10:30	15	0	2	0	15	17	0	0	0	17	32	298	7	305	6	0	6	130.9
10:30 to 10:45	19	0	5	0	19	19	0	4	0	19	38	357	5	362	7	0	7	130.9
10:45 to 11:00	9	0	3	0	9	10	0	3	0	10	19	312	6	318	6	0	6	130.9
11:00 to 11:15	17	1	4	0	18	16	0	6	0	16	34	339	5	344	6	1	7	130.9
11:15 to 11:30	19	1	2	0	20	14	0	1	0	14	34	326	5	331	8	0	8	130.9
11:30 to 11:45	14	1	3	0	15	13	2	3	0	15	30	297	5	302	5	0	5	147.9
11:45 to 12:00	21	0	3	0	21	22	1	2	0	23	44	340	1	341	8	0	8	147.9
12:00 to 12:15	9	0	2	0	9	13	0	4	0	13	22	319	5	324	6	0	6	147.9
12:15 to 12:30	26	0	4	0	26	19	0	4	0	19	45	338	5	343	6	0	6	147.9
12:30 to 12:45	23	0	6	0	23	19	0	6	0	19	42	309	2	311	9	0	9	147.9
12:45 to 13:00	22	0	7	0	22	19	0	7	0	19	41	351	2	353	8	0	8	147.9
13:00 to 13:15	26	3	10	0	29	25	3	9	0	28	57	302	2	304	10	0	10	147.9
13:15 to 13:30	24	0	7	0	24	29	0	8	0	29	53	319	4	323	7	1	8	147.9
13:30 to 13:45	25	0	9	0	25	27	0	9	0	27	52	331	6	337	6	0	6	147.9
13:45 to 14:00	33	0	11	0	33	21	0	11	0	21	54	303	4	307	11	0	11	147.9
14:00 to 14:15	27	0	14	0	27	33	0	13	0	33	60	343	3	346	11	0	11	147.9
14:15 to 14:30	17	0	8	0	17	29	0	9	0	29	46	292	6	298	7	0	7	127.9
14:30 to 14:45	27	0	8	0	27	24	0	6	0	24	51	302	3	305	8	0	8	127.9
14:45 to 15:00	21	0	9	0	21	21	0	11	0	21	42	296	6	302	6	0	6	127.9
15:00 to 15:15	30	0	12	0	30	34	0	12	0	34	64	299	5	304	7	0	7	127.9
15:15 to 15:30	22	0	14	0	22	20	0	14	0	20	42	279	4	283	7	0	7	127.9
15:30 to 15:45	28	1	15	0	29	30	1	15	0	31	60	254	3	257	8	0	8	127.9
15:45 to 16:00	27	0	12	0	27	27	0	12	0	27	54	308	4	312	9	0	9	127.9
16:00 to 16:15	20	0	10	0	20	28	0	10	0	28	48	272	4	276	4	0	4	127.9
16:15 to 16:30	6	0	7	0	6	9	0	7	0	9	15	315	3	318	3	0	3	127.9
16:30 to 16:45	27	0	7	0	27	22	0	7	0	22	49	308	7	315	4	0	4	127.9
16:45 to 17:00	16	0	6	0	16	18	0	6	0	18	34	265	7	272	3	0	3	127.9
17:00 to 17:15	19	1	6	0	20	20	1	6	0	21	41	294	6	300	2	0	2	127.9
17:15 to 17:30	14	0	3	0	14	20	0	3	0	20	34	318	9	327	2	0	2	127.9
17:30 to 17:45	19	0	3	0	19	17	0	3	0	17	36	301	12	313	2	0	2	127.9
17:45 to 18:00	14	0	2	0	14	10	0	2	0	10	24	299	6	305	3	0	3	127.9
18:00 to 18:15	23	0	12	0	23	19	0	12	0	19	42	251	4	255	3	0	3	127.9
18:15 to 18:30	19	1	8	0	20	20	1	8	0	21	41	269	5	274	3	0	3	127.9
18:30 to 18:45	21	2	14	0	23	26	2	14	0	28	51	240	2	242	6	0	6	127.9
18:45 to 19:00	24	0	12	0	24	23	0	12	0	23	47	221	2	223	7	0	7	127.9
TOTAL	913	13	316	1	927	918	13		1	932	1859	13697	260	13957				

Table 3.26 Site 1 Coles Express, South Dowling St, Waterloo - Survey Results – Hourly data - rolling at 15 minute intervals – Sunday 19/05/2013.

Sun 19/05/13 1-hour Data		Coles Express, South Dowling St, Waterloo										Grandtotal 1-hour Data	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles					Vehicles									
	IN					OUT									
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles	
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total					
6:00 to 7:00	34	2	19	1	37	33	1	14	0	34	71	416	24	440	
6:15 to 7:15	33	1	18	0	34	35	2	14	1	38	72	412	18	430	
6:30 to 7:30	29	1	14	0	30	28	2	13	1	31	61	424	15	439	
6:45 to 7:45	32	0	12	0	32	31	1	11	1	33	65	457	27	484	
7:00 to 8:00	29	0	8	0	29	30	1	10	1	32	61	487	21	508	
7:15 to 8:15	25	0	7	0	25	23	0	7	0	23	48	551	23	574	
7:30 to 8:30	27	0	6	0	27	29	0	6	0	29	56	608	27	635	
7:45 to 8:45	33	0	8	0	33	34	0	7	0	34	67	690	18	708	
8:00 to 9:00	44	0	11	0	44	43	0	6	0	43	87	780	22	802	
8:15 to 9:15	57	0	15	0	57	57	0	9	0	57	114	881	22	903	
8:30 to 9:30	74	0	16	0	74	69	0	12	0	69	143	959	24	983	
8:45 to 9:45	72	0	17	0	72	70	0	13	0	70	142	1034	22	1056	
9:00 to 10:00	65	0	16	0	65	63	0	14	0	63	128	1138	22	1160	
9:15 to 10:15	64	0	12	0	64	61	0	15	0	61	125	1179	24	1203	
9:30 to 10:30	54	0	11	0	54	55	0	10	0	55	109	1220	22	1242	
9:45 to 10:45	60	0	12	0	60	60	0	11	0	60	120	1280	23	1303	
10:00 to 11:00	61	0	12	0	61	62	0	11	0	62	123	1276	24	1300	
10:15 to 11:15	60	1	14	0	61	62	0	13	0	62	123	1306	23	1329	
10:30 to 11:30	64	2	14	0	66	59	0	14	0	59	125	1334	21	1355	
10:45 to 11:45	59	3	12	0	62	53	2	13	0	55	117	1274	21	1295	
11:00 to 12:00	71	3	12	0	74	65	3	12	0	68	142	1302	16	1318	
11:15 to 12:15	63	2	10	0	65	62	3	10	0	65	130	1282	16	1298	
11:30 to 12:30	70	1	12	0	71	67	3	13	0	70	141	1294	16	1310	
11:45 to 12:45	79	0	15	0	79	73	1	16	0	74	153	1306	13	1319	
12:00 to 13:00	80	0	19	0	80	70	0	21	0	70	150	1317	14	1331	
12:15 to 13:15	97	3	27	0	100	82	3	26	0	85	185	1300	11	1311	
12:30 to 13:30	95	3	30	0	98	92	3	30	0	95	193	1281	10	1291	
12:45 to 13:45	97	3	33	0	100	100	3	33	0	103	203	1303	14	1317	
13:00 to 14:00	108	3	37	0	111	102	3	37	0	105	216	1255	16	1271	
13:15 to 14:15	109	0	41	0	109	110	0	41	0	110	219	1296	17	1313	
13:30 to 14:30	102	0	42	0	102	110	0	42	0	110	212	1269	19	1288	
13:45 to 14:45	104	0	41	0	104	107	0	39	0	107	211	1240	16	1256	
14:00 to 15:00	92	0	39	0	92	107	0	39	0	107	199	1233	18	1251	
14:15 to 15:15	95	0	37	0	95	108	0	38	0	108	203	1189	20	1209	
14:30 to 15:30	100	0	43	0	100	99	0	43	0	99	199	1176	18	1194	
14:45 to 15:45	101	1	50	0	102	105	1	52	0	106	208	1128	18	1146	
15:00 to 16:00	107	1	53	0	108	111	1	53	0	112	220	1140	16	1156	
15:15 to 16:15	97	1	51	0	98	105	1	51	0	106	204	1113	15	1128	
15:30 to 16:30	81	1	44	0	82	94	1	44	0	95	177	1149	14	1163	
15:45 to 16:45	80	0	36	0	80	86	0	36	0	86	166	1203	18	1221	
16:00 to 17:00	69	0	30	0	69	77	0	30	0	77	146	1160	21	1181	
16:15 to 17:15	68	1	26	0	69	69	1	26	0	70	139	1182	23	1205	
16:30 to 17:30	76	1	22	0	77	80	1	22	0	81	158	1185	29	1214	
16:45 to 17:45	68	1	18	0	69	75	1	18	0	76	145	1178	34	1212	
17:00 to 18:00	66	1	14	0	67	67	1	14	0	68	135	1212	33	1245	
17:15 to 18:15	70	0	20	0	70	66	0	20	0	66	136	1169	31	1200	
17:30 to 18:30	75	1	25	0	76	66	1	25	0	67	143	1120	27	1147	
17:45 to 18:45	77	3	36	0	80	75	3	36	0	78	158	1059	17	1076	
18:00 to 19:00	87	3	46	0	90	88	3	46	0	91	181	981	13	994	

Table 3.27 Site 1 Coles Express, South Dowling St, Waterloo - Peak hours – Sunday 19/05/2013.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:45 to 12:45	79	0	15	0	79	73	1	16	0	74	153	1306	13	1319
PM														
15:00 to 16:00	107	1	53	0	108	111	1	53	0	112	220	1140	16	1156

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
10:30 to 11:30	64	2	14	0	66	59	0	14	0	59	125	1334	21	1355
PM														
12:00 to 13:00	80	0	19	0	80	70	0	21	0	70	150	1317	14	1331

Table 3.28 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive – Sunday 19/05/2013.

Sun 19/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	34	2	19	1	37	33	1	14	0	34	71	416	24	440
7:00 to 8:00	29	0	8	0	29	30	1	10	1	32	61	487	21	508
8:00 to 9:00	44	0	11	0	44	43	0	6	0	43	87	780	22	802
9:00 to 10:00	65	0	16	0	65	63	0	14	0	63	128	1138	22	1160
10:00 to 11:00	61	0	12	0	61	62	0	11	0	62	123	1276	24	1300
11:00 to 12:00	71	3	12	0	74	65	3	12	0	68	142	1302	16	1318
12:00 to 13:00	80	0	19	0	80	70	0	21	0	70	150	1317	14	1331
13:00 to 14:00	108	3	37	0	111	102	3	37	0	105	216	1255	16	1271
14:00 to 15:00	92	0	39	0	92	107	0	39	0	107	199	1233	18	1251
15:00 to 16:00	107	1	53	0	108	111	1	53	0	112	220	1140	16	1156
16:00 to 17:00	69	0	30	0	69	77	0	30	0	77	146	1160	21	1181
17:00 to 18:00	66	1	14	0	67	67	1	14	0	68	135	1212	33	1245
18:00 to 19:00	87	3	46	0	90	88	3	46	0	91	181	981	13	994
Total	913	13	316	1	927	918	13	307	1	932	1859	13697	260	13957

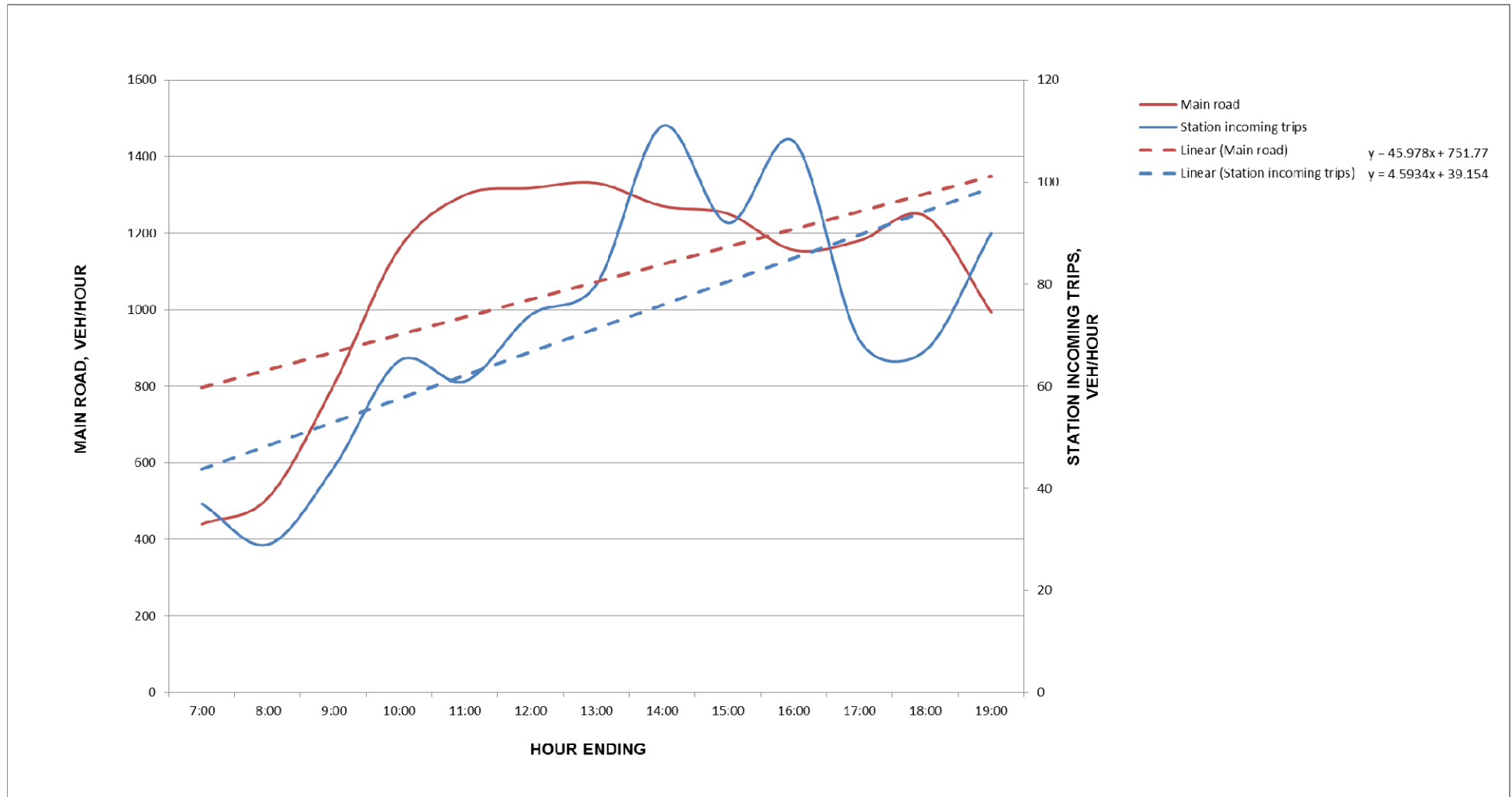


Figure 3.28 Site 1 Coles Express, South Dowling St, Waterloo - Hourly trip distribution – vehicles – Sunday 19/05/2013.

Table 3.29 Site 1 Coles Express, South Dowling St, Waterloo - Hourly data – consecutive for 7 days, Friday 17/05/2013 to Thursday 23/05/2013.

17/05/13-23/05/13 1-hour Data	Coles Express, South Dowling St, Waterloo																			Average		
	All vehicles																			1-hour Data		
	IN										OUT										IN + OUT	
									Average												Average	
TIME	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5 days	7 days	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5 days	7 days	5 days	7 days		
0:00 to 1:00	28	19	21	15	20	32	49	21	26	27	22	26	18	24	45	47	23	30	44	56		
1:00 to 2:00	14	21	19	16	14	24	26	17	19	14	26	20	16	21	29	29	19	22	36	41		
2:00 to 3:00	10	11	15	9	20	17	28	13	16	13	10	17	18	18	20	35	15	19	28	35		
3:00 to 4:00	13	8	15	10	13	9	24	12	13	13	10	16	15	20	10	33	15	17	27	30		
4:00 to 5:00	12	11	13	16	20	15	22	14	16	13	9	14	13	15	18	20	13	15	27	31		
5:00 to 6:00	36	31	30	31	26	20	25	31	28	30	28	23	30	30	20	21	28	26	59	54		
6:00 to 7:00	65	59	58	60	59	53	37	60	56	63	59	60	60	59	45	34	60	54	120	110		
7:00 to 8:00	50	58	46	50	57	49	31	52	49	53	59	54	51	52	53	33	54	51	106	100		
8:00 to 9:00	50	64	60	54	57	55	48	57	55	45	60	59	54	74	56	48	58	57	115	112		
9:00 to 10:00	62	69	60	62	63	73	71	63	66	63	68	61	59	60	72	68	62	64	125	130		
10:00 to 11:00	66	73	65	62	57	77	73	65	68	63	66	66	70	52	76	72	63	66	128	134		
11:00 to 12:00	86	72	48	61	78	84	80	69	73	92	81	50	56	75	80	78	71	73	140	146		
12:00 to 13:00	79	74	48	60	93	100	86	71	77	81	70	59	64	85	95	76	72	76	143	153		
13:00 to 14:00	82	48	37	44	84	104	122	59	74	74	64	36	43	86	111	116	61	76	120	150		
14:00 to 15:00	74	45	40	45	74	89	102	56	67	78	45	40	52	68	84	117	57	69	113	136		
15:00 to 16:00	81	50	50	49	81	110	108	62	76	88	48	49	45	72	95	112	60	73	122	149		
16:00 to 17:00	88	64	53	42	76	82	69	65	68	86	68	39	47	86	92	77	65	71	130	139		
17:00 to 18:00	99	57	41	40	77	84	67	63	66	101	56	46	42	72	83	68	63	67	126	133		
18:00 to 19:00	88	43	39	43	51	68	91	53	60	88	50	36	45	52	72	92	54	62	107	122		
19:00 to 20:00	26	42	40	47	11	41	51	33	37	29	47	52	52	14	52	52	39	43	72	80		
20:00 to 21:00	26	37	43	40	29	36	36	35	35	44	44	47	41	41	41	45	43	43	78	78		
21:00 to 22:00	30	41	42	37	43	36	30	39	37	39	38	45	42	57	47	43	44	44	83	81		
22:00 to 23:00	29	34	30	31	36	35	36	32	33	39	40	31	46	42	53	47	40	43	72	76		
23:00 to 0:00	23	29	29	29	36	49	23	29	31	24	24	42	47	37	51	27	35	36	64	67		
Total	1217	1060	942	953	1175	1342	1335	1071	1146	1260	1092	988	1026	1212	1400	1390	1114	1197	2185	2343		

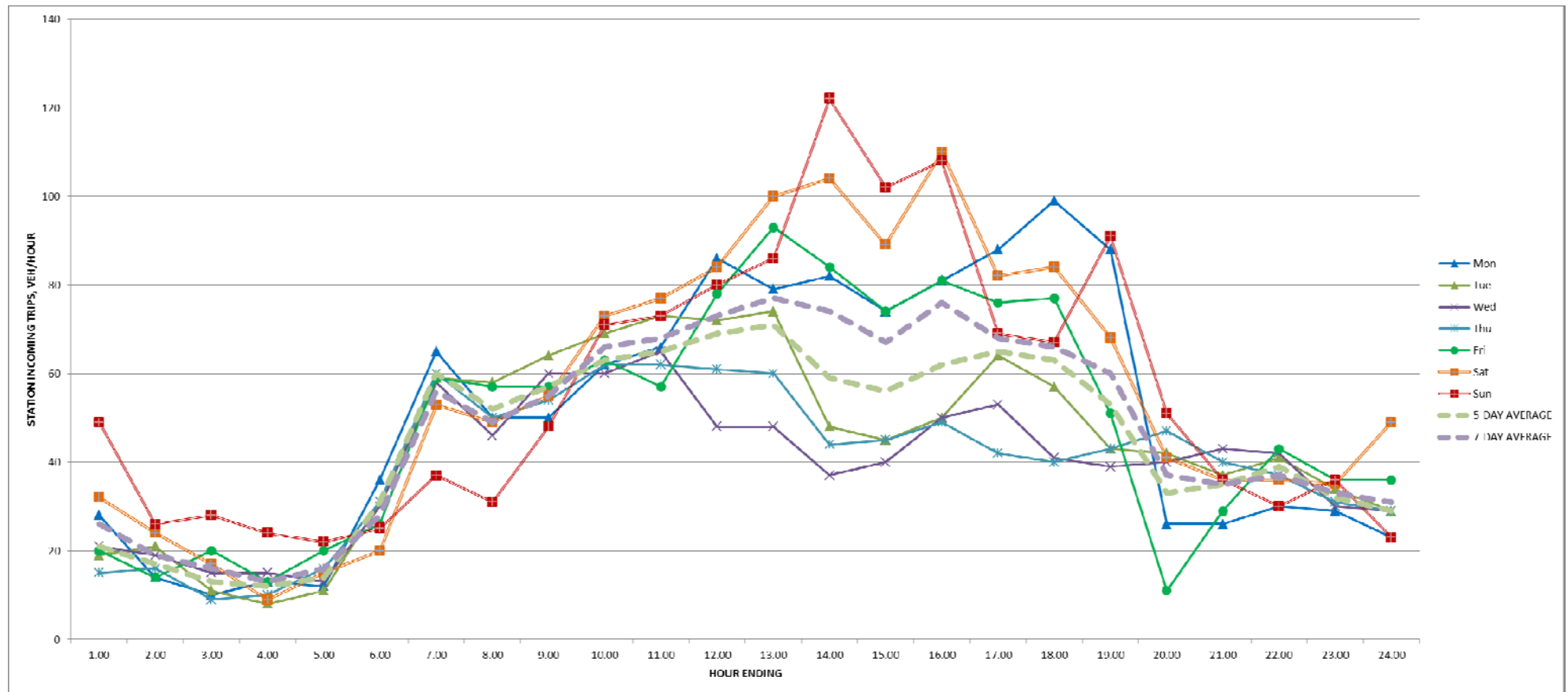


Figure 3.29 Site 1 Coles Express, South Dowling St, Waterloo – Hourly trip distribution – 7 days / 24 hours.

3.1.2 Site 2 BP, Davies Road, Padstow

Table 3.30 Site 2 - Survey Results – 15-minute interval data.

21-May-2013 15 minute Data			BP, Davies Rd, Padstow										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
WEATHER Fine			Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
			IN					OUT												
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total								
TIME	light	heavy	fast food	light	heavy			fast food												
6:00	to	6:15	7	3	0	0	10	6	4	0	0	10	20	132	18	150	4	0	4	129.9
6:15	to	6:30	9	0	0	0	9	7	0	0	0	7	16	198	22	220	3	1	4	129.9
6:30	to	6:45	11	0	0	0	11	10	0	0	0	10	21	199	38	237	4	1	5	129.9
6:45	to	7:00	8	1	0	0	9	8	1	0	0	9	18	241	36	277	4	1	5	129.9
7:00	to	7:15	13	2	1	0	15	10	0	0	0	10	25	203	31	234	4	2	6	129.9
7:15	to	7:30	6	1	0	0	7	5	1	1	0	6	13	273	35	308	4	2	6	129.9
7:30	to	7:45	8	1	1	0	9	7	1	1	0	8	17	255	27	282	4	1	5	129.9
7:45	to	8:00	8	3	0	0	11	9	3	0	0	12	23	274	24	298	4	1	5	129.9
8:00	to	8:15	9	4	0	1	14	11	3	0	0	14	28	254	30	284	5	1	6	129.9
8:15	to	8:30	8	0	1	0	8	7	2	1	1	10	18	228	27	255	4	1	5	129.9
8:30	to	8:45	3	0	0	0	3	5	1	0	0	6	9	199	29	228	5	1	6	129.9
8:45	to	9:00	11	3	2	1	15	8	0	0	1	9	24	242	35	277	5	3	8	129.9
9:00	to	9:15	9	2	0	0	11	6	3	2	0	9	20	258	35	293	5	1	6	129.9
9:15	to	9:30	9	2	0	0	11	8	1	0	0	9	20	215	31	246	5	1	6	129.9
9:30	to	9:45	7	3	0	0	10	8	3	0	0	11	21	228	34	262	6	3	9	129.9
9:45	to	10:00	4	0	1	0	4	8	0	1	0	8	12	240	36	276	5	2	7	129.9
10:00	to	10:15	7	0	1	0	7	8	0	0	0	8	15	172	35	207	4	1	5	129.9
10:15	to	10:30	5	3	2	0	8	7	0	1	0	7	15	227	34	261	4	3	7	129.9
10:30	to	10:45	6	1	0	0	7	6	2	1	0	8	15	191	32	223	4	3	7	129.9
10:45	to	11:00	11	1	0	0	12	10	1	0	0	11	23	219	28	247	4	3	7	129.9
11:00	to	11:15	11	1	4	0	12	10	2	0	0	12	24	210	33	243	6	2	8	129.9
11:15	to	11:30	11	4	1	0	15	8	2	2	0	10	25	238	36	274	6	4	10	129.9
11:30	to	11:45	15	1	1	0	16	10	5	1	0	15	31	242	21	263	5	4	9	129.9
11:45	to	12:00	7	1	1	0	8	10	1	2	0	11	19	267	32	299	5	7	12	129.9
12:00	to	12:15	13	4	4	0	17	12	4	7	0	16	33	234	38	272	5	7	12	129.9
12:15	to	12:30	15	1	5	0	16	15	1	8	0	16	32	217	33	250	6	5	11	129.9
12:30	to	12:45	6	2	5	0	8	9	2	3	0	11	19	251	21	272	5	3	8	129.9
12:45	to	13:00	6	1	5	0	7	8	1	2	0	9	16	241	21	262	5	4	9	129.9
13:00	to	13:15	6	2	2	0	8	5	2	6	0	7	15	271	26	297	5	2	7	129.9
13:15	to	13:30	15	2	4	0	17	9	3	5	0	12	29	329	36	365	5	5	10	129.9
13:30	to	13:45	8	1	2	0	9	11	1	3	0	12	21	288	26	314	5	3	8	129.9
13:45	to	14:00	5	2	4	0	7	7	1	2	0	8	15	278	25	303	4	4	8	129.9
14:00	to	14:15	10	3	1	0	13	10	2	3	0	12	25	360	39	399	4	3	7	129.9
14:15	to	14:30	11	0	3	0	11	10	2	3	0	12	23	401	36	437	4	3	7	129.9
14:30	to	14:45	11	2	1	0	13	13	1	2	0	14	27	371	33	404	4	3	7	129.9
14:45	to	15:00	12	2	0	0	14	11	1	2	0	12	26	422	31	453	3	0	3	129.9
15:00	to	15:15	12	2	1	0	14	14	2	1	0	16	30	458	28	486	2	1	3	129.9
15:15	to	15:30	13	2	1	0	15	16	1	0	0	17	32	469	25	494	3	0	3	129.9
15:30	to	15:45	15	2	0	0	17	12	3	0	0	15	32	543	22	565	3	1	4	129.9
15:45	to	16:00	15	2	0	0	17	16	2	0	0	18	35	687	32	719	3	0	3	129.9
16:00	to	16:15	16	3	0	0	19	15	0	0	0	15	34	681	19	700	3	0	3	129.9
16:15	to	16:30	16	1	1	0	17	12	2	0	0	14	31	652	24	676	4	1	5	129.9
16:30	to	16:45	18	0	0	0	18	17	1	1	0	18	36	623	14	637	5	1	6	129.9
16:45	to	17:00	16	0	1	0	16	18	1	0	0	19	35	680	20	700	4	1	5	129.9
17:00	to	17:15	23	2	1	0	25	20	2	0	0	22	47	621	15	636	4	2	6	129.9
17:15	to	17:30	18	2	0	0	20	15	1	2	0	16	36	688	7	695	4	2	6	129.9
17:30	to	17:45	20	1	2	0	21	20	1	1	0	21	42	625	10	635	5	0	5	129.9
17:45	to	18:00	13	0	2	0	13	21	1	1	0	22	35	656	17	673	4	1	5	129.9
18:00	to	18:15	12	0	0	0	12	13	0	1	0	13	25	548	9	557	4	1	5	129.9
18:15	to	18:30	14	1	1	0	15	10	1	0	0	11	26	541	10	551	4	2	6	129.9
18:30	to	18:45	16	1	3	0	17	14	2	3	0	16	33	488	7	495	3	2	5	129.9
18:45	to	19:00	5	0	0	0	5	9	0	0	0	9	14	385	7	392	3	0	3	129.9
TOTAL			563	78	65	2	643	554	77		2	633	1276	18413	1370	19783				

Table 3.31 Site 2 BP, Davies Road, Padstow - Survey Results – Hourly data - rolling at 15 minute intervals.

21-May-2013 1-hour Data			BP, Davies Rd, Padstow										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT								
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total				
TIME			light	heavy	fast food			light	heavy	fast food			Vehicles	LV	HV	Vehicles
6:00	to	7:00	35	4	0	0	39	31	5	0	0	36	75	770	114	884
6:15	to	7:15	41	3	1	0	44	35	1	0	0	36	80	841	127	968
6:30	to	7:30	38	4	1	0	42	33	2	1	0	35	77	916	140	1056
6:45	to	7:45	35	5	2	0	40	30	3	2	0	33	73	972	129	1101
7:00	to	8:00	35	7	2	0	42	31	5	2	0	36	78	1005	117	1122
7:15	to	8:15	31	9	1	1	41	32	8	2	0	40	81	1056	116	1172
7:30	to	8:30	33	8	2	1	42	34	9	2	1	44	86	1011	108	1119
7:45	to	8:45	28	7	1	1	36	32	9	1	1	42	78	955	110	1065
8:00	to	9:00	31	7	3	2	40	31	6	1	2	39	79	923	121	1044
8:15	to	9:15	31	5	3	1	37	26	6	3	2	34	71	927	126	1053
8:30	to	9:30	32	7	2	1	40	27	5	2	1	33	73	914	130	1044
8:45	to	9:45	36	10	2	1	47	30	7	2	1	38	85	943	135	1078
9:00	to	10:00	29	7	1	0	36	30	7	3	0	37	73	941	136	1077
9:15	to	10:15	27	5	2	0	32	32	4	1	0	36	68	855	136	991
9:30	to	10:30	23	6	4	0	29	31	3	2	0	34	63	867	139	1006
9:45	to	10:45	22	4	4	0	26	29	2	3	0	31	57	830	137	967
10:00	to	11:00	29	5	3	0	34	31	3	2	0	34	68	809	129	938
10:15	to	11:15	33	6	6	0	39	33	5	2	0	38	77	847	127	974
10:30	to	11:30	39	7	5	0	46	34	7	3	0	41	87	858	129	987
10:45	to	11:45	48	7	6	0	55	38	10	3	0	48	103	909	118	1027
11:00	to	12:00	44	7	7	0	51	38	10	5	0	48	99	957	122	1079
11:15	to	12:15	46	10	7	0	56	40	12	12	0	52	108	981	127	1108
11:30	to	12:30	50	7	11	0	57	47	11	18	0	58	115	960	124	1084
11:45	to	12:45	41	8	15	0	49	46	8	20	0	54	103	969	124	1093
12:00	to	13:00	40	8	19	0	48	44	8	20	0	52	100	943	113	1056
12:15	to	13:15	33	6	17	0	39	37	6	19	0	43	82	980	101	1081
12:30	to	13:30	33	7	16	0	40	31	8	16	0	39	79	1092	104	1196
12:45	to	13:45	35	6	13	0	41	33	7	16	0	40	81	1129	109	1238
13:00	to	14:00	34	7	12	0	41	32	7	16	0	39	80	1166	113	1279
13:15	to	14:15	38	8	11	0	46	37	7	13	0	44	90	1255	126	1381
13:30	to	14:30	34	6	10	0	40	38	6	11	0	44	84	1327	126	1453
13:45	to	14:45	37	7	9	0	44	40	6	10	0	46	90	1410	133	1543
14:00	to	15:00	44	7	5	0	51	44	6	10	0	50	101	1554	139	1693
14:15	to	15:15	46	6	5	0	52	48	6	8	0	54	106	1652	128	1780
14:30	to	15:30	48	8	3	0	56	54	5	5	0	59	115	1720	117	1837
14:45	to	15:45	52	8	2	0	60	53	7	3	0	60	120	1892	106	1998
15:00	to	16:00	55	8	2	0	63	58	8	1	0	66	129	2157	107	2264
15:15	to	16:15	59	9	1	0	68	59	6	0	0	65	133	2380	98	2478
15:30	to	16:30	62	8	1	0	70	55	7	0	0	62	132	2563	97	2660
15:45	to	16:45	65	6	1	0	71	60	5	1	0	65	136	2643	89	2732
16:00	to	17:00	66	4	2	0	70	62	4	1	0	66	136	2636	77	2713
16:15	to	17:15	73	3	3	0	76	67	6	1	0	73	149	2576	73	2649
16:30	to	17:30	75	4	2	0	79	70	5	3	0	75	154	2612	56	2668
16:45	to	17:45	77	5	4	0	82	73	5	3	0	78	160	2614	52	2666
17:00	to	18:00	74	5	5	0	79	76	5	4	0	81	160	2590	49	2639
17:15	to	18:15	63	3	4	0	66	69	3	5	0	72	138	2517	43	2560
17:30	to	18:30	59	2	5	0	61	64	3	3	0	67	128	2370	46	2416
17:45	to	18:45	55	2	6	0	57	58	4	5	0	62	119	2233	43	2276
18:00	to	19:00	47	2	4	0	49	46	3	4	0	49	98	1962	33	1995

Table 3.32 Site 2 BP, Davies Road, Padstow - Peak hours.

Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Site activity			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
10:45 to 11:45			48	7	6	0	55	38	10	3	0	48	103	909	118	1027
PM																
16:45 to 17:45			77	5	4	0	82	73	5	3	0	78	160	2614	52	2666
Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Frontage Road			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
7:15 to 8:15			31	9	1	1	41	32	8	2	0	40	81	1056	116	1172
PM																
15:45 to 16:45			65	6	1	0	71	60	5	1	0	65	136	2643	89	2732

Table 3.33 Site 2 BP, Davies Road, Padstow - Hourly data – consecutive.

1-hour Data			BP, Davies Rd, Padstow										Grandtotal	Main Road Data		Grandtotal - Main Road		
			Vehicles											1-hour Data	1-hour Data			
WEATHER Fine			IN					OUT					Vehicles				1-hour Data	
			Customer vehicles			Service/Delivery		Total	Customer vehicles			Service/Delivery		Total				
TIME			light	heavy	fast food	Service/Delivery		Total	light	heavy	fast food	Service/Delivery		Total		LV	HV	Vehicles
6:00	to	7:00	35	4	0	0		39	31	5	0	0		36	75	770	114	884
7:00	to	8:00	35	7	2	0		42	31	5	2	0		36	78	1005	117	1122
8:00	to	9:00	31	7	3	2		40	31	6	1	2		39	79	923	121	1044
9:00	to	10:00	29	7	1	0		36	30	7	3	0		37	73	941	136	1077
10:00	to	11:00	29	5	3	0		34	31	3	2	0		34	68	809	129	938
11:00	to	12:00	44	7	7	0		51	38	10	5	0		48	99	957	122	1079
12:00	to	13:00	40	8	19	0		48	44	8	20	0		52	100	943	113	1056
13:00	to	14:00	34	7	12	0		41	32	7	16	0		39	80	1166	113	1279
14:00	to	15:00	44	7	5	0		51	44	6	10	0		50	101	1554	139	1693
15:00	to	16:00	55	8	2	0		63	58	8	1	0		66	129	2157	107	2264
16:00	to	17:00	66	4	2	0		70	62	4	1	0		66	136	2636	77	2713
17:00	to	18:00	74	5	5	0		79	76	5	4	0		81	160	2590	49	2639
18:00	to	19:00	47	2	4	0		49	46	3	4	0		49	98	1962	33	1995
Total			563	78		2		643	554	77		2		633	1276	18413	1370	19783

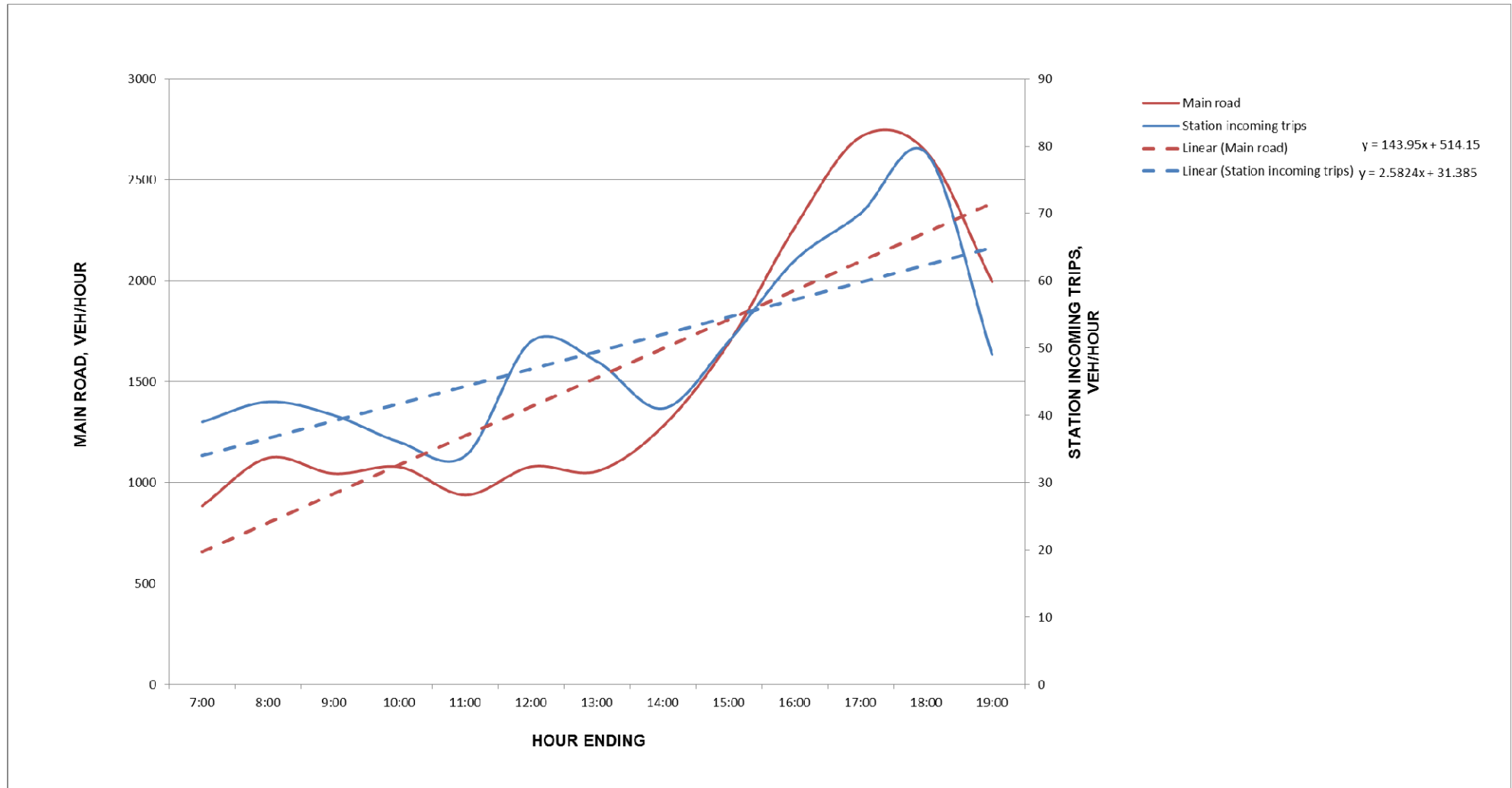


Figure 3.30 Site 2 BP, Davies Road, Padstow – Hourly trip distribution - vehicles.

3.1.3 Site 3 Caltex Woolworths, Princes Highway, Heathcote.

Table 3.34 Site 3 - Survey Results – 15-minute interval data.

DATE 27 March 2013		Caltex, Princes Highway, Heathcote										Grandtotal - site	Main Road Data		Grandtotal - Main Road		On-site parking demand			Petrol price
15 minute Data		Vehicles											15 minute Data		15 minute Data		15 minute Data			
WEATHER	Fine	IN					OUT						15 minute Data		15 minute Data		15 minute Data			
		Customer vehicles					Customer vehicles						15 minute Data		15 minute Data		15 minute Data			
		light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total		Vehicles	LV	HV	Vehicles	Formal	Informal	Total	
TIME		light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10	
6:00	to 6:15	17	4	0	0	21	19	3	0	0	22	43	498	18	516	7	0	7	139.9	
6:15	to 6:30	19	0	0	0	19	18	1	0	0	19	38	587	45	632	5	1	6	139.9	
6:30	to 6:45	18	0	0	0	18	18	0	0	0	18	36	537	31	568	6	0	6	139.9	
6:45	to 7:00	13	1	0	1	15	15	1	0	0	16	31	476	35	511	4	0	4	139.9	
7:00	to 7:15	22	1	0	0	23	23	1	0	0	24	47	581	33	614	6	0	6	139.9	
7:15	to 7:30	18	0	0	1	19	17	0	0	0	17	36	540	18	558	5	0	5	139.9	
7:30	to 7:45	9	1	0	0	10	8	0	0	0	8	18	520	22	542	5	1	6	139.9	
7:45	to 8:00	22	0	0	0	22	25	1	0	0	26	48	533	20	553	3	1	4	139.9	
8:00	to 8:15	18	0	0	0	18	18	0	0	1	19	37	455	21	476	7	1	8	139.9	
8:15	to 8:30	10	0	0	0	10	11	0	0	0	11	21	427	23	450	5	0	5	139.9	
8:30	to 8:45	19	2	0	0	21	20	1	0	1	22	43	442	16	458	4	0	4	139.9	
8:45	to 9:00	8	0	0	0	8	7	1	0	0	8	16	390	13	403	6	0	6	139.9	
9:00	to 9:15	16	1	0	1	18	15	0	0	0	15	33	350	25	375	6	0	6	139.9	
9:15	to 9:30	7	0	0	0	7	7	1	0	0	8	15	338	25	363	6	0	6	139.9	
9:30	to 9:45	9	1	0	1	11	10	0	0	0	10	21	293	33	326	4	0	4	139.9	
9:45	to 10:00	9	0	0	0	9	9	1	0	0	10	19	248	22	270	5	0	5	139.9	
10:00	to 10:15	12	1	0	0	13	11	1	0	0	12	25	279	29	308	4	0	4	139.9	
10:15	to 10:30	11	1	0	0	12	13	1	0	0	14	26	221	38	259	4	0	4	139.9	
10:30	to 10:45	6	2	0	0	8	6	2	0	1	9	17	248	33	281	4	0	4	139.9	
10:45	to 11:00	5	1	0	1	7	4	0	0	0	4	11	215	27	242	5	0	5	139.9	
11:00	to 11:15	17	0	0	0	17	16	1	0	0	17	34	193	18	211	4	0	4	139.9	
11:15	to 11:30	9	0	0	1	10	10	0	0	0	10	20	207	23	230	6	0	6	139.9	
11:30	to 11:45	13	0	0	0	13	13	0	0	0	13	26	182	28	210	7	0	7	139.9	
11:45	to 12:00	10	1	0	0	11	9	0	0	1	10	21	147	26	173	5	0	5	139.9	
12:00	to 12:15	11	0	0	1	12	12	0	0	1	13	25	208	24	232	5	0	5	139.9	
12:15	to 12:30	9	1	0	0	10	10	0	0	0	10	20	231	13	244	6	0	6	139.9	
12:30	to 12:45	10	1	0	0	11	12	2	0	0	14	25	212	16	228	6	0	6	139.9	
12:45	to 13:00	11	0	0	0	11	11	0	0	1	12	23	281	25	306	5	0	5	139.9	
13:00	to 13:15	12	0	0	0	12	14	0	0	0	14	26	219	21	240	3	0	3	139.9	
13:15	to 13:30	13	1	0	0	14	13	1	0	1	15	29	242	17	259	5	0	5	139.9	
13:30	to 13:45	10	1	0	0	11	8	1	0	0	9	20	238	19	257	4	0	4	139.9	
13:45	to 14:00	10	1	0	0	11	14	0	0	0	14	25	245	20	265	4	0	4	139.9	
14:00	to 14:15	11	1	0	0	12	8	1	0	0	9	21	249	20	269	4	0	4	139.9	
14:15	to 14:30	12	0	0	0	12	11	0	0	0	11	23	235	24	259	4	0	4	139.9	
14:30	to 14:45	12	1	0	0	13	8	0	0	0	8	21	263	24	287	5	0	5	139.9	
14:45	to 15:00	14	0	0	0	14	15	1	0	0	16	30	291	18	309	4	0	4	139.9	
15:00	to 15:15	9	1	0	0	10	11	0	0	0	11	21	298	29	327	4	0	4	139.9	
15:15	to 15:30	10	1	0	0	11	5	1	0	0	6	17	248	20	268	4	1	5	139.9	
15:30	to 15:45	14	1	0	0	15	15	2	0	0	17	32	297	13	310	4	1	5	139.9	
15:45	to 16:00	16	0	0	0	16	15	0	0	0	15	31	314	17	331	4	1	5	139.9	
16:00	to 16:15	17	1	0	0	18	18	1	0	0	19	37	325	14	339	2	1	3	139.9	
16:15	to 16:30	11	1	0	0	12	15	1	0	0	16	28	322	9	331	2	1	3	139.9	
16:30	to 16:45	29	0	0	0	29	19	0	0	0	19	48	399	12	411	2	1	3	136.9	
16:45	to 17:00	16	0	0	0	16	20	0	0	0	20	36	355	10	365	2	1	3	136.9	
17:00	to 17:15	21	0	0	0	21	20	0	0	0	20	41	360	11	371	4	1	5	136.9	
17:15	to 17:30	15	0	0	0	15	19	0	0	0	19	34	351	11	362	6	1	7	136.9	
17:30	to 17:45	19	0	0	0	19	16	0	0	0	16	35	346	10	356	4	1	5	136.9	
17:45	to 18:00	19	0	0	0	19	19	0	0	0	19	38	362	9	371	4	1	5	136.9	
18:00	to 18:15	13	0	0	0	13	15	0	0	0	15	28	343	8	351	3	1	4	136.9	
18:15	to 18:30	8	0	0	0	8	11	0	0	0	11	19	276	10	286	3	1	4	136.9	
18:30	to 18:45	7	0	0	0	7	8	0	0	0	8	15	194	5	199	3	1	4	136.9	
18:45	to 19:00	11	0	0	0	11	8	0	0	0	8	19	168	3	171	4	1	5	136.9	
TOTAL		687	29	0	7	723	692	27		7	726	1449	16779	1054	17833					

Table 3.35 Site 3 Caltex Woolworths, Princes Highway, Heathcote - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013	Caltex, Princes Highway, Heathcote											Grandtotal	Main Road Data		Grandtotal - Main Road
1-hour Data	Vehicles											1-hour Data			1-hour Data
WEATHER Fine	IN					OUT									
	Customer vehicles					Customer vehicles									
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	
6:00 to 7:00	67	5	0	1	73	70	5	0	0	75	148	2098	129	2227	
6:15 to 7:15	72	2	0	1	75	74	3	0	0	77	152	2181	144	2325	
6:30 to 7:30	71	2	0	2	75	73	2	0	0	75	150	2134	117	2251	
6:45 to 7:45	62	3	0	2	67	63	2	0	0	65	132	2117	108	2225	
7:00 to 8:00	71	2	0	1	74	73	2	0	0	75	149	2174	93	2267	
7:15 to 8:15	67	1	0	1	69	68	1	0	1	70	139	2048	81	2129	
7:30 to 8:30	59	1	0	0	60	62	1	0	1	64	124	1935	86	2021	
7:45 to 8:45	69	2	0	0	71	74	2	0	2	78	149	1857	80	1937	
8:00 to 9:00	55	2	0	0	57	56	2	0	2	60	117	1714	73	1787	
8:15 to 9:15	53	3	0	1	57	53	2	0	1	56	113	1609	77	1686	
8:30 to 9:30	50	3	0	1	54	49	3	0	1	53	107	1520	79	1599	
8:45 to 9:45	40	2	0	2	44	39	2	0	0	41	85	1371	96	1467	
9:00 to 10:00	41	2	0	2	45	41	2	0	0	43	88	1229	105	1334	
9:15 to 10:15	37	2	0	1	40	37	3	0	0	40	80	1158	109	1267	
9:30 to 10:30	41	3	0	1	45	43	3	0	0	46	91	1041	122	1163	
9:45 to 10:45	38	4	0	0	42	39	5	0	1	45	87	996	122	1118	
10:00 to 11:00	34	5	0	1	40	34	4	0	1	39	79	963	127	1090	
10:15 to 11:15	39	4	0	1	44	39	4	0	1	44	88	877	116	993	
10:30 to 11:30	37	3	0	2	42	36	3	0	1	40	82	863	101	964	
10:45 to 11:45	44	1	0	2	47	43	1	0	0	44	91	797	96	893	
11:00 to 12:00	49	1	0	1	51	48	1	0	1	50	101	729	95	824	
11:15 to 12:15	43	1	0	2	46	44	0	0	2	46	92	744	101	845	
11:30 to 12:30	43	2	0	1	46	44	0	0	2	46	92	768	91	859	
11:45 to 12:45	40	3	0	1	44	43	2	0	2	47	91	798	79	877	
12:00 to 13:00	41	2	0	1	44	45	2	0	2	49	93	932	78	1010	
12:15 to 13:15	42	2	0	0	44	47	2	0	1	50	94	943	75	1018	
12:30 to 13:30	46	2	0	0	48	50	3	0	2	55	103	954	79	1033	
12:45 to 13:45	46	2	0	0	48	46	2	0	2	50	98	980	82	1062	
13:00 to 14:00	45	3	0	0	48	49	2	0	1	52	100	944	77	1021	
13:15 to 14:15	44	4	0	0	48	43	3	0	1	47	95	974	76	1050	
13:30 to 14:30	43	3	0	0	46	41	2	0	0	43	89	967	83	1050	
13:45 to 14:45	45	3	0	0	48	41	1	0	0	42	90	992	88	1080	
14:00 to 15:00	49	2	0	0	51	42	2	0	0	44	95	1038	86	1124	
14:15 to 15:15	47	2	0	0	49	45	1	0	0	46	95	1087	95	1182	
14:30 to 15:30	45	3	0	0	48	39	2	0	0	41	89	1100	91	1191	
14:45 to 15:45	47	3	0	0	50	46	4	0	0	50	100	1134	80	1214	
15:00 to 16:00	49	3	0	0	52	46	3	0	0	49	101	1157	79	1236	
15:15 to 16:15	57	3	0	0	60	53	4	0	0	57	117	1184	64	1248	
15:30 to 16:30	58	3	0	0	61	63	4	0	0	67	128	1258	53	1311	
15:45 to 16:45	73	2	0	0	75	67	2	0	0	69	144	1360	52	1412	
16:00 to 17:00	73	2	0	0	75	72	2	0	0	74	149	1401	45	1446	
16:15 to 17:15	77	1	0	0	78	74	1	0	0	75	153	1436	42	1478	
16:30 to 17:30	81	0	0	0	81	78	0	0	0	78	159	1465	44	1509	
16:45 to 17:45	71	0	0	0	71	75	0	0	0	75	146	1412	42	1454	
17:00 to 18:00	74	0	0	0	74	74	0	0	0	74	148	1419	41	1460	
17:15 to 18:15	66	0	0	0	66	69	0	0	0	69	135	1402	38	1440	
17:30 to 18:30	59	0	0	0	59	61	0	0	0	61	120	1327	37	1364	
17:45 to 18:45	47	0	0	0	47	53	0	0	0	53	100	1175	32	1207	
18:00 to 19:00	39	0	0	0	39	42	0	0	0	42	81	981	26	1007	

Table 3.36 Site 3 Caltex Woolworths, Princes Highway, Heathcote - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food			light	heavy	fast food						
AM														
6:15 to 7:15	72	2	0	1	75	74	3	0	0	77	152	2181	144	2325
PM														
16:30 to 17:30	81	0	0	0	81	78	0	0	0	78	159	1465	44	1509

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food			light	heavy	fast food						
AM														
6:15 to 7:15	72	2	0	1	75	74	3	0	0	77	152	2181	144	2325
PM														
16:30 to 17:30	81	0	0	0	81	78	0	0	0	78	159	1465	44	1509

Table 3.37 Site 3 Caltex Woolworths, Princes Highway, Heathcote - Hourly data – consecutive.

DATE 27 March 2013	Caltex, Princes Highway, Heathcote										Grandtotal	Main Road Data		Grandtotal - Main Road
1-hour Data	Vehicles										1-hour Data	1-hour Data		1-hour Data
WEATHER Fine	IN					OUT								
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food			light	heavy	fast food						
6:00 to 7:00	67	5	0	1	73	70	5	0	0	75	148	2098	129	2227
7:00 to 8:00	71	2	0	1	74	73	2	0	0	75	149	2174	93	2267
8:00 to 9:00	55	2	0	0	57	56	2	0	2	60	117	1714	73	1787
9:00 to 10:00	41	2	0	2	45	41	2	0	0	43	88	1229	105	1334
10:00 to 11:00	34	5	0	1	40	34	4	0	1	39	79	963	127	1090
11:00 to 12:00	49	1	0	1	51	48	1	0	1	50	101	729	95	824
12:00 to 13:00	41	2	0	1	44	45	2	0	2	49	93	932	78	1010
13:00 to 14:00	45	3	0	0	48	49	2	0	1	52	100	944	77	1021
14:00 to 15:00	49	2	0	0	51	42	2	0	0	44	95	1038	86	1124
15:00 to 16:00	49	3	0	0	52	46	3	0	0	49	101	1157	79	1236
16:00 to 17:00	73	2	0	0	75	72	2	0	0	74	149	1401	45	1446
17:00 to 18:00	74	0	0	0	74	74	0	0	0	74	148	1419	41	1460
18:00 to 19:00	39	0	0	0	39	42	0	0	0	42	81	981	26	1007
Total	687	29		7	723	692	27		7	726	1449	16779	1054	17833

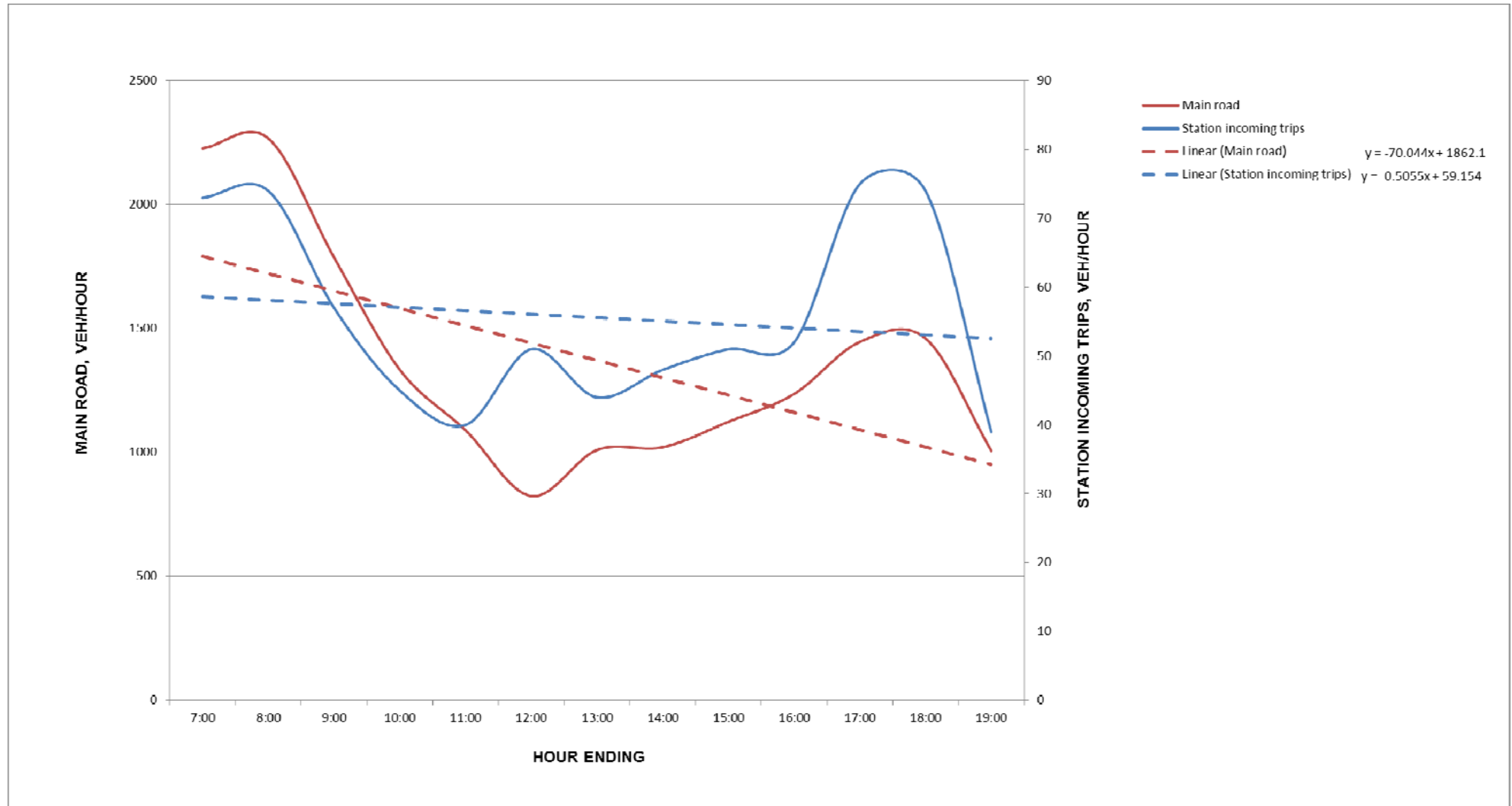


Figure 3.31 Site 3 Caltex Woolworths, Princes Highway, Heathcote – Hourly trip distribution - vehicles.

3.1.4 Site 4 APW, Great Western Hwy, Greystanes.

Table 3.38 Site 4 - Survey Results – 15-minute interval data.

DATE 27 March 2013		APW, Great Western Hwy, Greystanes										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
15 minute Data		Vehicles											15 minute Data	15 minute Data		15 minute Data	15 minute Data		
WEATHER	Fine	IN					OUT												
		Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total								
TIME		light	heavy	fast food				light	heavy			fast food							
6:00	to 6:15	7	2	0	0	9	7	2	0	0	9	18	79	10	89	0	0	0	134.4
6:15	to 6:30	11	1	0	0	12	10	1	0	0	11	23	121	8	129	0	0	0	134.4
6:30	to 6:45	8	1	0	0	9	9	1	0	0	10	19	122	13	135	0	0	0	134.4
6:45	to 7:00	12	1	0	0	13	12	1	0	0	13	26	120	17	137	0	0	0	134.4
7:00	to 7:15	14	1	0	0	15	12	0	0	0	12	27	123	10	133	0	1	1	134.4
7:15	to 7:30	15	2	0	0	17	16	3	0	0	19	36	153	14	167	0	0	0	134.4
7:30	to 7:45	11	1	0	0	12	12	1	0	0	13	25	161	9	170	0	0	0	134.4
7:45	to 8:00	13	0	0	0	13	13	0	0	0	13	26	152	5	157	0	0	0	134.4
8:00	to 8:15	8	0	0	1	9	6	0	0	0	6	15	197	15	212	0	0	0	134.4
8:15	to 8:30	14	0	0	0	14	16	0	0	1	17	31	171	10	181	0	1	1	134.4
8:30	to 8:45	8	1	0	0	9	8	1	0	0	9	18	207	10	217	0	1	1	134.4
8:45	to 9:00	13	0	0	0	13	12	0	0	0	12	25	182	18	200	0	2	2	134.4
9:00	to 9:15	14	0	0	0	14	12	0	0	0	12	26	161	15	176	0	1	1	134.4
9:15	to 9:30	14	0	0	0	14	17	0	0	0	17	31	149	10	159	0	1	1	134.4
9:30	to 9:45	7	0	0	0	7	7	0	0	0	7	14	135	21	156	0	1	1	134.4
9:45	to 10:00	17	2	0	0	19	14	2	0	0	16	35	173	16	189	0	0	0	134.4
10:00	to 10:15	11	0	0	0	11	14	0	0	0	14	25	226	29	255	0	1	1	134.4
10:15	to 10:30	14	1	0	1	16	13	1	0	0	14	30	119	10	129	0	0	0	134.9
10:30	to 10:45	11	0	0	0	11	11	0	0	1	12	23	200	26	226	0	0	0	134.9
10:45	to 11:00	5	0	0	0	5	6	0	0	0	6	11	138	21	159	0	1	1	134.9
11:00	to 11:15	10	0	0	0	10	11	0	0	0	11	21	242	23	265	0	1	1	134.9
11:15	to 11:30	9	0	0	0	9	8	0	0	0	8	17	175	13	188	0	1	1	134.9
11:30	to 11:45	12	0	0	0	12	10	0	0	0	10	22	250	19	269	0	0	0	134.9
11:45	to 12:00	14	0	0	0	14	12	0	0	0	12	26	178	18	196	0	0	0	134.9
12:00	to 12:15	14	0	0	0	14	12	0	0	0	12	26	204	20	224	0	1	1	134.9
12:15	to 12:30	15	0	0	0	15	14	0	0	0	14	29	200	17	217	0	1	1	134.9
12:30	to 12:45	13	2	0	0	15	7	1	0	0	8	23	203	37	240	0	2	2	134.9
12:45	to 13:00	14	1	0	0	15	13	2	0	0	15	30	237	27	264	0	1	1	134.9
13:00	to 13:15	8	0	0	0	8	9	0	0	0	9	17	144	9	153	0	1	1	134.9
13:15	to 13:30	15	0	0	0	15	13	0	0	0	13	28	284	26	310	0	1	1	134.9
13:30	to 13:45	12	0	0	0	12	11	1	0	0	12	24	280	16	296	0	2	2	134.9
13:45	to 14:00	13	1	0	0	14	13	0	0	0	13	27	257	21	278	0	2	2	134.9
14:00	to 14:15	10	0	0	0	10	10	1	0	0	11	21	196	18	214	0	1	1	134.9
14:15	to 14:30	9	1	0	0	10	17	1	0	0	18	28	304	32	336	0	2	2	134.9
14:30	to 14:45	10	0	0	0	10	10	0	0	0	10	20	309	24	333	0	2	2	134.9
14:45	to 15:00	10	0	0	0	10	11	0	0	0	11	21	273	17	290	0	1	1	134.9
15:00	to 15:15	13	0	0	0	13	13	0	0	0	13	26	275	15	290	0	1	1	134.9
15:15	to 15:30	11	1	0	0	12	10	1	0	0	11	23	344	20	364	0	1	1	134.9
15:30	to 15:45	23	1	0	0	24	26	1	0	0	27	51	323	18	341	0	1	1	134.9
15:45	to 16:00	18	0	0	0	18	15	0	0	0	15	33	384	17	401	0	1	1	134.9
16:00	to 16:15	6	0	0	0	6	7	0	0	0	7	13	397	18	415	0	0	0	134.9
16:15	to 16:30	19	0	0	0	19	16	0	0	0	16	35	404	14	418	0	0	0	134.9
16:30	to 16:45	17	0	0	0	17	21	0	0	0	21	38	435	13	448	0	0	0	134.9
16:45	to 17:00	25	1	0	0	26	15	0	0	0	15	41	391	10	401	0	0	0	134.9
17:00	to 17:15	25	0	0	0	25	29	1	0	0	30	55	414	9	423	0	0	0	134.9
17:15	to 17:30	16	0	0	0	16	19	0	0	0	19	35	502	7	509	0	0	0	134.9
17:30	to 17:45	12	3	0	0	15	12	2	0	0	14	29	561	13	574	0	0	0	134.9
17:45	to 18:00	24	1	0	0	25	21	1	0	0	22	47	413	11	424	0	0	0	134.9
18:00	to 18:15	22	0	0	0	22	21	0	0	0	21	43	429	11	440	0	0	0	134.9
18:15	to 18:30	24	1	0	0	25	30	0	0	0	30	55	357	14	371	0	0	0	134.9
18:30	to 18:45	17	1	0	0	18	19	1	0	0	20	38	356	5	361	0	4	4	134.9
18:45	to 19:00	20	0	0	0	20	17	0	0	0	17	37	368	9	377	0	4	4	134.9
TOTAL		707	27	0	2	736	699	26		2	727	1463	13178	828	14006				

Note that at this station 6 formal car parking spaces were permanently occupied by rental cars, likely from a neighbouring business.

Table 3.39 Site 4 APW, Great Western Hwy, Greystanes - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013	APW, Great Western Hwy, Greystanes										Grandtotal	Main Road Data		Grandtotal - Main Road
1-hour Data	Vehicles										1-hour Data	1-hour Data		1-hour Data
WEATHER Fine	IN					OUT					Vehicles	LV	HV	Vehicles
TIME	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	38	5	0	0	43	38	5	0	0	43	86	442	48	490
6:15 to 7:15	45	4	0	0	49	43	3	0	0	46	95	486	48	534
6:30 to 7:30	49	5	0	0	54	49	5	0	0	54	108	518	54	572
6:45 to 7:45	52	5	0	0	57	52	5	0	0	57	114	557	50	607
7:00 to 8:00	53	4	0	0	57	53	4	0	0	57	114	589	38	627
7:15 to 8:15	47	3	0	1	51	47	4	0	0	51	102	663	43	706
7:30 to 8:30	46	1	0	1	48	47	1	0	1	49	97	681	39	720
7:45 to 8:45	43	1	0	1	45	43	1	0	1	45	90	727	40	767
8:00 to 9:00	43	1	0	1	45	42	1	0	1	44	89	757	53	810
8:15 to 9:15	49	1	0	0	50	48	1	0	1	50	100	721	53	774
8:30 to 9:30	49	1	0	0	50	49	1	0	0	50	100	699	53	752
8:45 to 9:45	48	0	0	0	48	48	0	0	0	48	96	627	64	691
9:00 to 10:00	52	2	0	0	54	50	2	0	0	52	106	618	62	680
9:15 to 10:15	49	2	0	0	51	52	2	0	0	54	105	683	76	759
9:30 to 10:30	49	3	0	1	53	48	3	0	0	51	104	653	76	729
9:45 to 10:45	53	3	0	1	57	52	3	0	1	56	113	718	81	799
10:00 to 11:00	41	1	0	1	43	44	1	0	1	46	89	683	86	769
10:15 to 11:15	40	1	0	1	42	41	1	0	1	43	85	699	80	779
10:30 to 11:30	35	0	0	0	35	36	0	0	1	37	72	755	83	838
10:45 to 11:45	36	0	0	0	36	35	0	0	0	35	71	805	76	881
11:00 to 12:00	45	0	0	0	45	41	0	0	0	41	96	845	73	918
11:15 to 12:15	49	0	0	0	49	42	0	0	0	42	91	807	70	877
11:30 to 12:30	55	0	0	0	55	48	0	0	0	48	103	832	74	906
11:45 to 12:45	56	2	0	0	58	45	1	0	0	46	104	785	92	877
12:00 to 13:00	56	3	0	0	59	46	3	0	0	49	108	844	101	945
12:15 to 13:15	50	3	0	0	53	43	3	0	0	46	99	784	90	874
12:30 to 13:30	50	3	0	0	53	42	3	0	0	45	98	868	99	967
12:45 to 13:45	49	1	0	0	50	46	3	0	0	49	99	945	78	1023
13:00 to 14:00	48	1	0	0	49	46	1	0	0	47	96	965	72	1037
13:15 to 14:15	50	1	0	0	51	47	2	0	0	49	100	1017	81	1098
13:30 to 14:30	44	2	0	0	46	51	3	0	0	54	100	1037	87	1124
13:45 to 14:45	42	2	0	0	44	50	2	0	0	52	96	1066	95	1161
14:00 to 15:00	39	1	0	0	40	48	2	0	0	50	90	1082	91	1173
14:15 to 15:15	42	1	0	0	43	51	1	0	0	52	95	1161	88	1249
14:30 to 15:30	44	1	0	0	45	44	1	0	0	45	90	1201	76	1277
14:45 to 15:45	57	2	0	0	59	60	2	0	0	62	121	1215	70	1285
15:00 to 16:00	65	2	0	0	67	64	2	0	0	66	133	1326	70	1396
15:15 to 16:15	58	2	0	0	60	58	2	0	0	60	120	1448	73	1521
15:30 to 16:30	66	1	0	0	67	64	1	0	0	65	132	1508	67	1575
15:45 to 16:45	60	0	0	0	60	59	0	0	0	59	119	1620	62	1682
16:00 to 17:00	67	1	0	0	68	59	0	0	0	59	127	1627	55	1682
16:15 to 17:15	86	1	0	0	87	81	1	0	0	82	169	1644	46	1690
16:30 to 17:30	83	1	0	0	84	84	1	0	0	85	169	1742	39	1781
16:45 to 17:45	78	4	0	0	82	75	3	0	0	78	160	1868	39	1907
17:00 to 18:00	77	4	0	0	81	81	4	0	0	85	166	1890	40	1930
17:15 to 18:15	74	4	0	0	78	73	3	0	0	76	154	1905	42	1947
17:30 to 18:30	82	5	0	0	87	84	3	0	0	87	174	1760	49	1809
17:45 to 18:45	87	3	0	0	90	91	2	0	0	93	183	1555	41	1596
18:00 to 19:00	83	2	0	0	85	87	1	0	0	88	173	1510	39	1549

Table 3.40 Site 4 APW, Great Western Hwy, Greystanes - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
	light	heavy	fast food			light	heavy	fast food						
AM														
7:00 to 8:00	53	4	0	0	57	53	4	0	0	57	114	589	38	627
PM														
17:45 to 18:45	87	3	0	0	90	91	2	0	0	93	183	1555	41	1596

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
	light	heavy	fast food			light	heavy	fast food						
AM														
11:00 to 12:00	45	0	0	0	45	41	0	0	0	41	86	845	73	918
PM														
17:15 to 18:15	74	4	0	0	78	73	3	0	0	76	154	1905	42	1947

Table 3.41 Site 4 APW, Great Western Hwy, Greystanes - Hourly data – consecutive.

DATE 27 March 2013 1-hour Data	APW, Great Western Hwy, Greystanes										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine TIME	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	38	5	0	0	43	38	5	0	0	43	86	442	48	490
7:00 to 8:00	53	4	0	0	57	53	4	0	0	57	114	589	38	627
8:00 to 9:00	43	1	0	1	45	42	1	0	1	44	89	757	53	810
9:00 to 10:00	52	2	0	0	54	50	2	0	0	52	106	618	62	680
10:00 to 11:00	41	1	0	1	43	44	1	0	1	46	89	683	86	769
11:00 to 12:00	45	0	0	0	45	41	0	0	0	41	86	845	73	918
12:00 to 13:00	56	3	0	0	59	46	3	0	0	49	108	844	101	945
13:00 to 14:00	48	1	0	0	49	46	1	0	0	47	96	965	72	1037
14:00 to 15:00	39	1	0	0	40	48	2	0	0	50	90	1082	91	1173
15:00 to 16:00	65	2	0	0	67	64	2	0	0	66	133	1326	70	1396
16:00 to 17:00	67	1	0	0	68	59	0	0	0	59	127	1627	55	1682
17:00 to 18:00	77	4	0	0	81	81	4	0	0	85	166	1890	40	1930
18:00 to 19:00	83	2	0	0	85	87	1	0	0	88	173	1510	39	1549
Total	707	27		2	736	699	26		2	727	1463	13178	828	14006

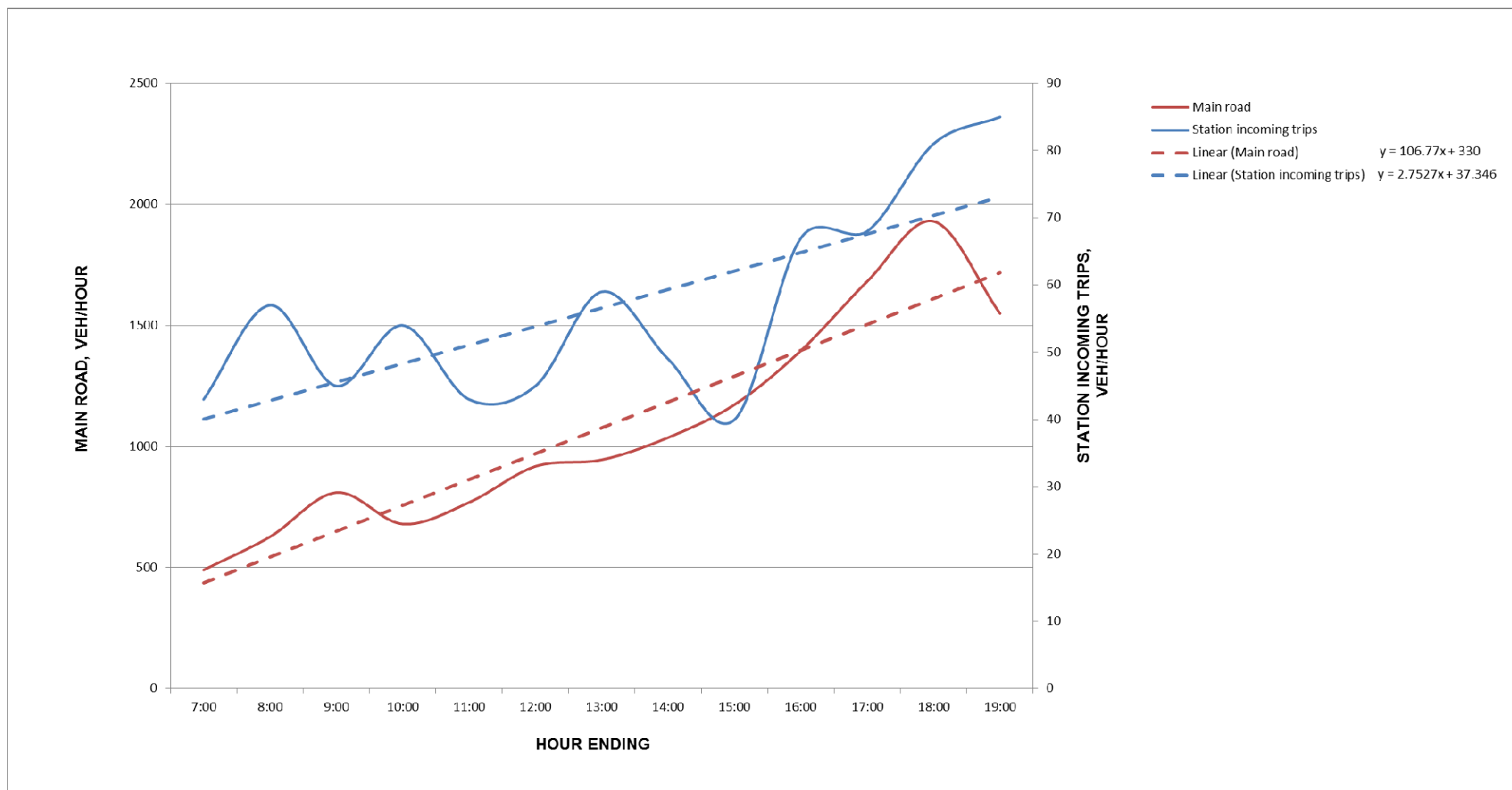


Figure 3.32 Site 4 APW, Great Western Hwy, Greystanes – Hourly trip distribution - vehicles.

3.1.5 Site 5 7-Eleven, Aspen St, South Penrith

Table 3.42 Site 5 - Survey Results – 15-minute interval data.

DATE 28 March 2013 15 minute Data		7-Eleven, Aspen St, South Penrith										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
WEATHER Fine		Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
		IN					OUT												
		Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10
TIME		light	heavy	fast food			light	heavy	fast food										
6:00	to 6:15	17	1	0	0	18	15	0	0	0	15	33	148	11	159	4	0	4	135.9
6:15	to 6:30	10	0	0	0	10	11	1	0	0	12	22	202	11	213	2	1	3	135.9
6:30	to 6:45	23	3	0	0	26	23	3	0	0	26	52	303	14	317	6	1	7	135.9
6:45	to 7:00	14	0	0	0	14	14	0	0	0	14	28	329	9	338	1	0	1	135.9
7:00	to 7:15	10	1	0	0	11	10	1	0	0	11	22	272	28	300	2	1	3	135.9
7:15	to 7:30	16	0	0	0	16	15	0	0	0	15	31	363	22	385	4	1	5	135.9
7:30	to 7:45	18	1	0	0	19	19	1	0	0	20	39	371	15	386	2	0	2	135.9
7:45	to 8:00	15	1	0	0	16	16	1	0	0	17	33	634	12	646	2	2	4	135.9
8:00	to 8:15	13	0	0	0	13	13	0	0	0	13	26	546	21	567	2	1	3	135.9
8:15	to 8:30	21	1	0	0	22	22	1	0	0	23	45	545	14	559	3	1	4	135.9
8:30	to 8:45	9	2	0	0	11	9	2	0	0	11	22	477	15	492	2	0	2	135.9
8:45	to 9:00	9	0	0	0	9	8	0	0	0	8	17	523	12	535	1	0	1	135.9
9:00	to 9:15	16	0	0	0	16	17	0	0	0	17	33	423	16	439	4	0	4	135.9
9:15	to 9:30	14	1	0	0	15	13	1	0	0	14	29	407	16	423	4	0	4	135.9
9:30	to 9:45	7	0	0	0	7	8	0	0	0	8	15	363	24	387	3	0	3	135.9
9:45	to 10:00	8	0	0	0	8	8	0	0	0	8	16	323	21	344	1	0	1	135.9
10:00	to 10:15	12	0	0	0	12	10	0	0	0	10	22	310	31	341	5	0	5	135.9
10:15	to 10:30	15	0	0	1	16	14	0	0	1	15	31	235	15	250	3	1	4	135.9
10:30	to 10:45	16	0	0	0	16	18	0	0	0	18	34	302	18	320	4	0	4	135.9
10:45	to 11:00	11	0	0	0	11	11	0	0	0	11	22	375	17	392	3	0	3	135.9
11:00	to 11:15	18	0	0	0	18	16	0	0	0	16	34	283	21	304	4	0	4	135.9
11:15	to 11:30	12	0	0	1	13	14	0	0	1	15	28	254	16	270	3	1	4	135.9
11:30	to 11:45	11	0	0	0	11	11	0	0	0	11	22	290	21	311	2	0	2	135.9
11:45	to 12:00	13	0	0	0	13	13	0	0	0	13	26	275	7	282	2	0	2	135.9
12:00	to 12:15	11	0	0	0	11	12	0	0	0	12	23	292	16	308	1	0	1	135.9
12:15	to 12:30	11	1	0	0	12	9	1	0	0	10	22	313	14	327	5	1	6	135.9
12:30	to 12:45	9	0	0	0	9	7	0	0	0	7	16	341	13	354	4	0	4	135.9
12:45	to 13:00	13	1	0	0	14	13	0	0	0	13	27	290	31	321	4	0	4	135.9
13:00	to 13:15	12	0	0	0	12	10	0	0	0	10	22	323	19	342	5	0	5	135.9
13:15	to 13:30	15	1	0	0	16	17	0	0	0	17	33	321	20	341	4	1	5	135.9
13:30	to 13:45	12	1	0	0	13	13	1	0	0	14	27	337	18	355	3	1	4	135.9
13:45	to 14:00	14	1	0	0	15	14	1	0	0	15	30	324	24	348	2	1	3	135.9
14:00	to 14:15	19	1	0	0	20	18	1	0	0	19	39	320	14	334	2	1	3	135.9
14:15	to 14:30	20	1	0	0	21	19	1	0	0	20	41	319	16	335	3	0	3	135.9
14:30	to 14:45	24	0	0	0	24	21	1	0	0	22	46	352	14	366	3	1	4	135.9
14:45	to 15:00	21	0	0	0	21	18	1	0	0	19	40	386	16	402	4	1	5	135.9
15:00	to 15:15	25	1	0	0	26	22	1	0	0	23	49	392	28	420	3	1	4	135.9
15:15	to 15:30	27	0	0	0	27	26	0	0	0	26	53	437	20	457	2	0	2	135.9
15:30	to 15:45	23	0	0	0	23	24	0	0	0	24	47	407	30	437	3	1	4	135.9
15:45	to 16:00	27	1	0	0	28	24	1	0	0	25	53	429	18	447	4	1	5	135.9
16:00	to 16:15	25	1	0	0	26	23	1	0	0	24	50	327	14	341	5	2	7	135.9
16:15	to 16:30	21	0	0	0	21	24	0	0	0	24	45	376	22	398	4	1	5	135.9
16:30	to 16:45	18	1	0	0	19	22	0	0	0	22	41	360	8	368	5	2	7	135.9
16:45	to 17:00	16	0	0	0	16	19	1	0	0	20	36	423	12	435	3	1	4	135.9
17:00	to 17:15	12	0	0	0	12	13	0	0	0	13	25	386	14	400	5	0	5	135.9
17:15	to 17:30	12	0	0	0	12	13	0	0	0	13	25	370	11	381	4	0	4	135.9
17:30	to 17:45	10	1	0	0	11	11	1	0	0	12	23	386	13	399	5	0	5	135.9
17:45	to 18:00	16	0	0	0	16	14	0	0	0	14	30	405	8	413	3	0	3	135.9
18:00	to 18:15	13	0	0	0	13	12	0	0	0	12	25	347	6	353	1	0	1	135.9
18:15	to 18:30	13	0	0	0	13	15	0	0	0	15	28	333	4	337	3	2	5	135.9
18:30	to 18:45	14	0	0	0	14	15	0	0	0	15	29	331	3	334	2	1	3	135.9
18:45	to 19:00	11	0	0	0	11	11	0	0	0	11	22	324	8	332	4	1	5	135.9
TOTAL		792	23	0	2	817	787	23		2	812	1629	18504	841	19345				

Table 3.43 Site 5 7-Eleven, Aspen St, South Penrith - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 28 March 2013			7-Eleven, Aspen St, South Penrith										Grandtotal	Main Road Data		Grandtotal - Main Road
1-hour Data			Vehicles										1-hour Data	1-hour Data		1-hour Data
WEATHER Fine			IN					OUT						LV	HV	
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total				
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles			Vehicles
6:00	to	7:00	64	4	0	0	68	63	4	0	0	67	135	982	45	1027
6:15	to	7:15	57	4	0	0	61	58	5	0	0	63	124	1106	62	1168
6:30	to	7:30	63	4	0	0	67	62	4	0	0	66	133	1267	73	1340
6:45	to	7:45	58	2	0	0	60	58	2	0	0	60	120	1335	74	1409
7:00	to	8:00	59	3	0	0	62	60	3	0	0	63	125	1640	77	1717
7:15	to	8:15	62	2	0	0	64	63	2	0	0	65	129	1914	70	1984
7:30	to	8:30	67	3	0	0	70	70	3	0	0	73	143	2096	62	2158
7:45	to	8:45	58	4	0	0	62	60	4	0	0	64	126	2202	62	2264
8:00	to	9:00	52	3	0	0	55	52	3	0	0	55	110	2091	62	2153
8:15	to	9:15	55	3	0	0	58	56	3	0	0	59	117	1968	57	2025
8:30	to	9:30	48	3	0	0	51	47	3	0	0	50	101	1830	59	1889
8:45	to	9:45	46	1	0	0	47	46	1	0	0	47	94	1716	68	1784
9:00	to	10:00	45	1	0	0	46	46	1	0	0	47	93	1516	77	1593
9:15	to	10:15	41	1	0	0	42	39	1	0	0	40	82	1403	92	1495
9:30	to	10:30	42	0	0	1	43	40	0	0	1	41	84	1231	91	1322
9:45	to	10:45	51	0	0	1	52	50	0	0	1	51	103	1170	85	1255
10:00	to	11:00	54	0	0	1	55	53	0	0	1	54	109	1222	81	1303
10:15	to	11:15	60	0	0	1	61	59	0	0	1	60	121	1195	71	1266
10:30	to	11:30	57	0	0	1	58	59	0	0	1	60	118	1214	72	1286
10:45	to	11:45	52	0	0	1	53	52	0	0	1	53	106	1202	75	1277
11:00	to	12:00	54	0	0	1	55	54	0	0	1	55	110	1102	65	1167
11:15	to	12:15	47	0	0	1	48	50	0	0	1	51	99	1111	60	1171
11:30	to	12:30	46	1	0	0	47	45	1	0	0	46	93	1170	58	1228
11:45	to	12:45	44	1	0	0	45	41	1	0	0	42	87	1221	50	1271
12:00	to	13:00	44	2	0	0	46	41	1	0	0	42	88	1236	74	1310
12:15	to	13:15	45	2	0	0	47	39	1	0	0	40	87	1267	77	1344
12:30	to	13:30	49	2	0	0	51	47	0	0	0	47	98	1275	83	1358
12:45	to	13:45	52	3	0	0	55	53	1	0	0	54	109	1271	88	1359
13:00	to	14:00	53	3	0	0	56	54	2	0	0	56	112	1305	81	1386
13:15	to	14:15	60	4	0	0	64	62	3	0	0	65	129	1302	76	1378
13:30	to	14:30	65	4	0	0	69	64	4	0	0	68	137	1300	72	1372
13:45	to	14:45	77	3	0	0	80	72	4	0	0	76	156	1315	68	1383
14:00	to	15:00	84	2	0	0	86	76	4	0	0	80	166	1377	60	1437
14:15	to	15:15	90	2	0	0	92	80	4	0	0	84	176	1449	74	1523
14:30	to	15:30	97	1	0	0	98	87	3	0	0	90	188	1567	78	1645
14:45	to	15:45	96	1	0	0	97	90	2	0	0	92	189	1622	94	1716
15:00	to	16:00	102	2	0	0	104	96	2	0	0	98	202	1665	96	1761
15:15	to	16:15	102	2	0	0	104	97	2	0	0	99	203	1600	82	1682
15:30	to	16:30	96	2	0	0	98	95	2	0	0	97	195	1539	84	1623
15:45	to	16:45	91	3	0	0	94	93	2	0	0	95	189	1492	62	1554
16:00	to	17:00	80	2	0	0	82	88	2	0	0	90	172	1486	56	1542
16:15	to	17:15	67	1	0	0	68	78	1	0	0	79	147	1545	56	1601
16:30	to	17:30	58	1	0	0	59	67	1	0	0	68	127	1539	45	1584
16:45	to	17:45	50	1	0	0	51	56	2	0	0	58	109	1565	50	1615
17:00	to	18:00	50	1	0	0	51	51	1	0	0	52	103	1547	46	1593
17:15	to	18:15	51	1	0	0	52	50	1	0	0	51	103	1508	38	1546
17:30	to	18:30	52	1	0	0	53	52	1	0	0	53	106	1471	31	1502
17:45	to	18:45	56	0	0	0	56	56	0	0	0	56	112	1416	21	1437
18:00	to	19:00	51	0	0	0	51	53	0	0	0	53	104	1335	21	1356

Table 3.44 Site 5 7-Eleven, Aspen St, South Penrith - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
7:30 to 8:30	67	3	0	0	70	70	3	0	0	73	143	2096	62	2158
PM														
15:15 to 16:15	102	2	0	0	104	97	2	0	0	99	203	1600	82	1682

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
7:45 to 8:45	58	4	0	0	62	60	4	0	0	64	126	2202	62	2264
PM														
15:00 to 16:00	102	2	0	0	104	96	2	0	0	98	202	1665	96	1761

Table 3.45 Site 5 7-Eleven, Aspen St, South Penrith - Hourly data – consecutive.

DATE 28 March 2013 1-hour Data	7-Eleven, Aspen St, South Penrith										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine TIME	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	64	4	0	0	68	63	4	0	0	67	135	982	45	1027
7:00 to 8:00	59	3	0	0	62	60	3	0	0	63	125	1640	77	1717
8:00 to 9:00	52	3	0	0	55	52	3	0	0	55	110	2091	62	2153
9:00 to 10:00	45	1	0	0	46	46	1	0	0	47	93	1516	77	1593
10:00 to 11:00	54	0	0	1	55	53	0	0	1	54	109	1222	81	1303
11:00 to 12:00	54	0	0	1	55	54	0	0	1	55	110	1102	65	1167
12:00 to 13:00	44	2	0	0	46	41	1	0	0	42	88	1236	74	1310
13:00 to 14:00	53	3	0	0	56	54	2	0	0	56	112	1305	81	1386
14:00 to 15:00	84	2	0	0	86	76	4	0	0	80	166	1377	60	1437
15:00 to 16:00	102	2	0	0	104	96	2	0	0	98	202	1665	96	1761
16:00 to 17:00	80	2	0	0	82	88	2	0	0	90	172	1486	56	1542
17:00 to 18:00	50	1	0	0	51	51	1	0	0	52	103	1547	46	1593
18:00 to 19:00	51	0	0	0	51	53	0	0	0	53	104	1335	21	1356
Total	792	23		2	817	787	23		2	812	1629	18504	841	19345

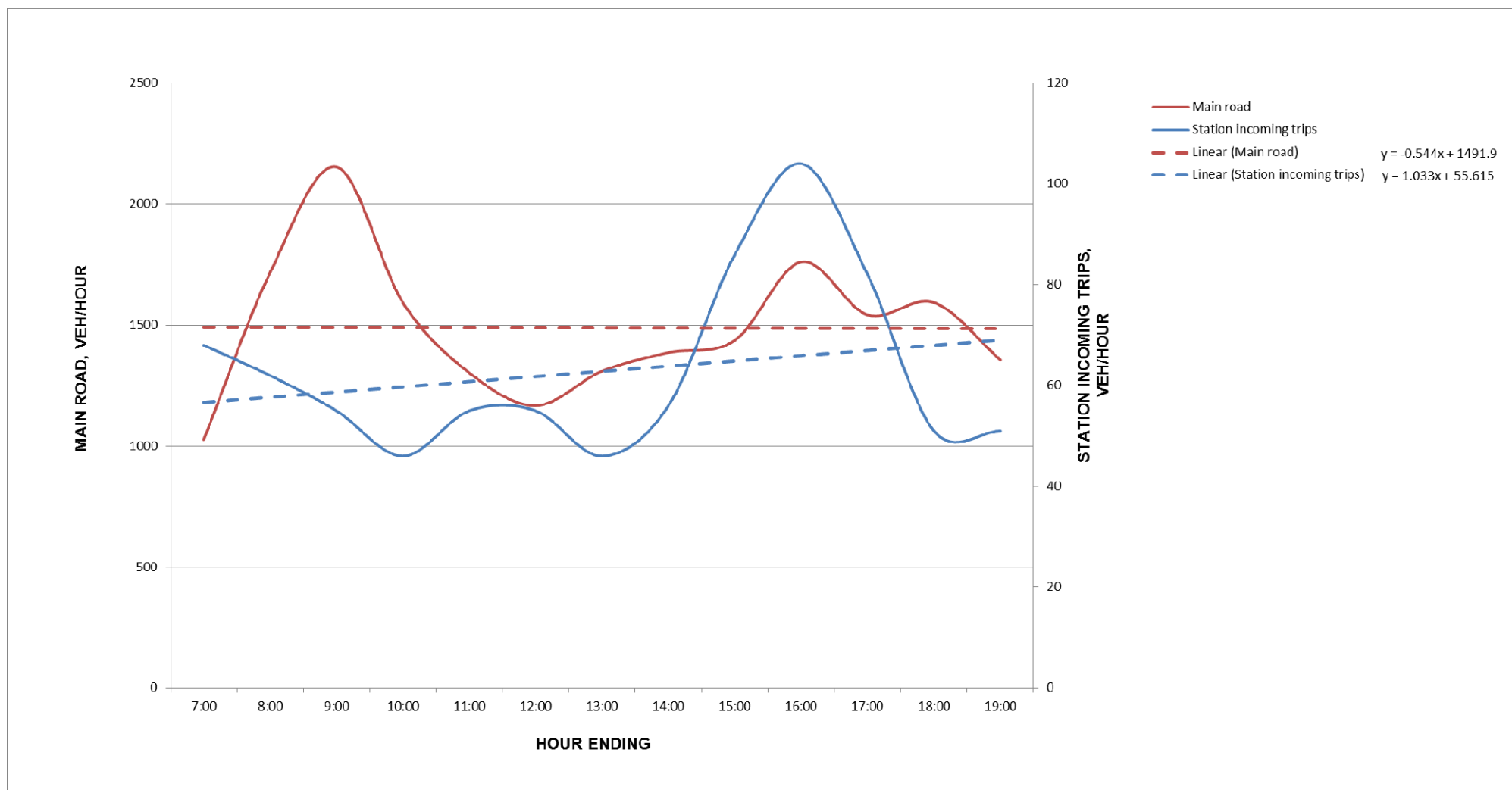


Figure 3.33 Site 5 7-Eleven, Aspen St, South Penrith – Hourly trip distribution - vehicles.

3.1.6 Site 6 BP, Sunnyholt Rd, Kings Park

Table 3.46 Site 6 - Survey Results – 15-minute interval data.

DATE 27 March 2013 15 minute Data			BP, Sunnyholt Rd, Kings Park										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
			Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
WEATHER Fine			IN					OUT												
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10
6:00	to	6:15	7	2	0	0	9	5	2	0	0	7	16	78	8	86	1	0	1	133.9
6:15	to	6:30	4	1	0	0	5	6	1	0	0	7	12	96	21	117	1	0	1	133.9
6:30	to	6:45	9	3	0	0	12	8	1	0	0	9	21	137	17	154	1	0	1	133.9
6:45	to	7:00	7	2	0	0	9	7	3	0	0	10	19	155	21	176	1	0	1	133.9
7:00	to	7:15	9	3	0	0	12	8	4	0	0	12	24	142	22	164	1	0	1	133.9
7:15	to	7:30	8	2	0	0	10	8	3	0	0	11	21	222	12	234	2	1	3	133.9
7:30	to	7:45	4	4	0	0	8	5	2	0	0	7	15	216	15	231	2	0	2	133.9
7:45	to	8:00	18	3	0	0	21	14	3	0	0	17	38	217	23	240	2	3	5	133.9
8:00	to	8:15	9	2	0	0	11	4	3	0	0	7	18	213	21	234	2	3	5	133.9
8:15	to	8:30	6	4	0	1	11	5	2	0	0	7	18	215	32	247	2	4	6	133.9
8:30	to	8:45	6	1	0	0	7	4	2	0	1	7	14	224	33	257	2	3	5	133.9
8:45	to	9:00	10	1	0	0	11	11	1	0	0	12	23	235	32	267	3	4	7	133.9
9:00	to	9:15	6	1	0	1	8	10	1	0	0	11	19	211	28	239	3	4	7	133.9
9:15	to	9:30	11	3	0	0	14	11	2	0	1	14	28	232	30	262	3	4	7	133.9
9:30	to	9:45	13	2	0	1	16	8	4	0	1	13	29	248	40	288	3	4	7	133.9
9:45	to	10:00	9	3	0	0	12	8	2	0	0	10	22	266	43	309	3	4	7	133.9
10:00	to	10:15	10	1	0	0	11	8	1	0	0	9	20	300	41	341	2	4	6	133.9
10:15	to	10:30	11	1	0	0	12	8	1	0	0	9	21	299	33	332	2	3	5	133.9
10:30	to	10:45	8	2	0	0	10	9	1	0	0	10	20	280	25	305	2	3	5	133.9
10:45	to	11:00	7	1	0	0	8	7	2	0	0	9	17	258	35	293	2	3	5	133.9
11:00	to	11:15	11	1	0	0	12	12	0	0	0	12	24	306	25	331	3	3	6	133.9
11:15	to	11:30	10	3	0	0	13	7	2	0	0	9	22	259	31	290	3	4	7	133.9
11:30	to	11:45	6	0	0	0	6	11	2	0	0	13	19	284	39	323	3	4	7	133.9
11:45	to	12:00	9	0	0	0	9	8	0	0	0	8	17	314	26	340	3	4	7	133.9
12:00	to	12:15	13	4	0	0	17	12	2	0	0	14	31	278	28	306	3	4	7	133.9
12:15	to	12:30	7	2	0	0	9	5	2	0	0	7	16	256	25	281	3	4	7	133.9
12:30	to	12:45	9	2	0	0	11	8	2	0	0	10	21	347	31	378	3	8	11	133.9
12:45	to	13:00	8	2	0	0	10	8	2	0	0	10	20	310	17	327	3	4	7	133.9
13:00	to	13:15	16	1	0	0	17	16	2	0	0	18	35	342	24	366	3	3	6	133.9
13:15	to	13:30	17	2	0	1	20	17	2	0	0	19	39	317	28	345	3	4	7	133.9
13:30	to	13:45	19	3	0	1	23	19	2	0	1	22	45	361	29	390	3	4	7	133.9
13:45	to	14:00	19	0	0	0	19	24	3	0	1	28	47	344	29	373	3	3	6	133.9
14:00	to	14:15	19	2	0	0	21	23	0	0	0	23	44	379	20	399	3	3	6	133.9
14:15	to	14:30	19	1	0	0	20	22	0	0	0	22	42	395	25	420	3	4	7	133.9
14:30	to	14:45	14	4	0	0	18	14	2	0	0	16	34	348	17	365	3	7	10	133.9
14:45	to	15:00	18	5	0	0	23	19	8	0	0	27	50	361	21	382	3	5	8	133.9
15:00	to	15:15	19	3	0	0	22	20	2	0	0	22	44	384	21	405	3	4	7	133.9
15:15	to	15:30	17	2	0	0	19	17	2	0	0	19	38	354	17	371	3	2	5	133.9
15:30	to	15:45	18	3	0	0	21	18	3	0	0	21	42	375	19	394	3	4	7	133.9
15:45	to	16:00	9	1	0	0	10	11	1	0	0	12	22	408	21	429	2	3	5	133.9
16:00	to	16:15	11	1	0	0	12	9	1	0	0	10	22	378	14	392	2	3	5	133.9
16:15	to	16:30	10	2	0	0	12	11	2	0	0	13	25	407	16	423	3	3	6	133.9
16:30	to	16:45	17	1	0	0	18	18	1	0	0	19	37	401	15	416	3	4	7	133.9
16:45	to	17:00	29	1	0	0	30	30	1	0	0	31	61	445	10	455	3	3	6	133.9
17:00	to	17:15	14	1	0	0	15	15	0	0	0	15	30	369	10	379	3	5	8	133.9
17:15	to	17:30	10	1	0	0	11	12	1	0	0	13	24	454	8	462	3	2	5	133.9
17:30	to	17:45	11	2	0	0	13	14	1	0	0	15	28	421	10	431	3	3	6	133.9
17:45	to	18:00	12	1	0	0	13	14	3	0	0	17	30	458	10	468	3	2	5	133.9
18:00	to	18:15	17	0	0	0	17	13	0	0	0	13	30	385	14	399	3	1	4	133.9
18:15	to	18:30	11	0	0	0	11	13	0	0	0	13	24	364	11	375	3	1	4	133.9
18:30	to	18:45	6	0	0	0	6	7	0	0	0	7	13	306	3	309	3	1	4	133.9
18:45	to	19:00	0	0	0	0	0	7	1	0	0	8	8	286	5	291	3	1	4	133.9
TOTAL			597	93	0	5	695	608	91		5	704	1399	15640	1151	16791				

Table 3.47 Site 6 BP, Sunnyholt Rd, Kings Park - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013 1-hour Data			BP, Sunnyholt Rd, Kings Park										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT								
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME			light	heavy	fast food			light	heavy	fast food						
6:00	to	7:00	27	8	0	0	35	26	7	0	0	33	68	466	67	533
6:15	to	7:15	29	9	0	0	38	29	9	0	0	38	76	530	81	611
6:30	to	7:30	33	10	0	0	43	31	11	0	0	42	85	656	72	728
6:45	to	7:45	28	11	0	0	39	28	12	0	0	40	79	735	70	805
7:00	to	8:00	39	12	0	0	51	35	12	0	0	47	98	797	72	869
7:15	to	8:15	39	11	0	0	50	31	11	0	0	42	92	868	71	939
7:30	to	8:30	37	13	0	1	51	28	10	0	0	38	89	861	91	952
7:45	to	8:45	39	10	0	1	50	27	10	0	1	38	88	869	109	978
8:00	to	9:00	31	8	0	1	40	24	8	0	1	33	73	887	118	1005
8:15	to	9:15	28	7	0	2	37	30	6	0	1	37	74	885	125	1010
8:30	to	9:30	33	6	0	1	40	36	6	0	2	44	84	902	123	1025
8:45	to	9:45	40	7	0	2	49	40	8	0	2	50	99	926	130	1056
9:00	to	10:00	39	9	0	2	50	37	9	0	2	48	98	957	141	1098
9:15	to	10:15	43	9	0	1	53	35	9	0	2	46	99	1046	154	1200
9:30	to	10:30	43	7	0	1	51	32	8	0	1	41	92	1113	157	1270
9:45	to	10:45	38	7	0	0	45	33	5	0	0	38	83	1145	142	1287
10:00	to	11:00	36	5	0	0	41	32	5	0	0	37	78	1137	134	1271
10:15	to	11:15	37	5	0	0	42	36	4	0	0	40	82	1143	118	1261
10:30	to	11:30	36	7	0	0	43	35	5	0	0	40	83	1103	116	1219
10:45	to	11:45	34	5	0	0	39	37	6	0	0	43	82	1107	130	1237
11:00	to	12:00	36	4	0	0	40	38	4	0	0	42	82	1163	121	1284
11:15	to	12:15	38	7	0	0	45	38	6	0	0	44	89	1135	124	1259
11:30	to	12:30	35	6	0	0	41	36	6	0	0	42	83	1132	118	1250
11:45	to	12:45	38	8	0	0	46	33	6	0	0	39	85	1195	110	1305
12:00	to	13:00	37	10	0	0	47	33	8	0	0	41	88	1191	101	1292
12:15	to	13:15	40	7	0	0	47	37	8	0	0	45	92	1255	97	1352
12:30	to	13:30	50	7	0	1	58	49	8	0	0	57	115	1316	100	1416
12:45	to	13:45	60	8	0	2	70	60	8	0	1	69	139	1330	98	1428
13:00	to	14:00	71	6	0	2	79	76	9	0	2	87	166	1364	110	1474
13:15	to	14:15	74	7	0	2	83	83	7	0	2	92	175	1401	106	1507
13:30	to	14:30	76	6	0	1	83	88	5	0	2	95	178	1479	103	1582
13:45	to	14:45	71	7	0	0	78	83	5	0	1	89	167	1466	91	1557
14:00	to	15:00	70	12	0	0	82	78	10	0	0	88	170	1483	83	1566
14:15	to	15:15	70	13	0	0	83	75	12	0	0	87	170	1488	84	1572
14:30	to	15:30	68	14	0	0	82	70	14	0	0	84	166	1447	76	1523
14:45	to	15:45	72	13	0	0	85	74	15	0	0	89	174	1474	78	1552
15:00	to	16:00	63	9	0	0	72	66	8	0	0	74	146	1521	78	1599
15:15	to	16:15	55	7	0	0	62	55	7	0	0	62	124	1515	71	1586
15:30	to	16:30	48	7	0	0	55	49	7	0	0	56	111	1568	70	1638
15:45	to	16:45	47	5	0	0	52	49	5	0	0	54	106	1594	66	1660
16:00	to	17:00	67	5	0	0	72	68	5	0	0	73	145	1631	55	1686
16:15	to	17:15	70	5	0	0	75	74	4	0	0	78	153	1622	51	1673
16:30	to	17:30	70	4	0	0	74	75	3	0	0	78	152	1669	43	1712
16:45	to	17:45	64	5	0	0	69	71	3	0	0	74	143	1689	38	1727
17:00	to	18:00	47	5	0	0	52	55	5	0	0	60	112	1702	38	1740
17:15	to	18:15	50	4	0	0	54	53	5	0	0	58	112	1718	42	1760
17:30	to	18:30	51	3	0	0	54	54	4	0	0	58	112	1628	45	1673
17:45	to	18:45	46	1	0	0	47	47	3	0	0	50	97	1513	38	1551
18:00	to	19:00	34	0	0	0	34	40	1	0	0	41	75	1341	33	1374

Table 3.48 Site 6 BP, Sunnyholt Rd, Kings Park - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
8:45 to 9:45	40	7	0	2	49	40	8	0	2	50	99	926	130	1056
PM														
13:30 to 14:30	76	6	0	1	83	88	5	0	2	95	178	1479	103	1582
17:15 to 18:15	50	4	0	0	54	53	5	0	0	58	112	1718	42	1760

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
AM														
11:45 to 12:45	38	8	0	0	46	33	6	0	0	39	85	1195	110	1305
PM														
17:15 to 18:15	50	4	0	0	54	53	5	0	0	58	112	1718	42	1760

Table 3.49 Site 6 BP, Sunnyholt Rd, Kings Park - Hourly data – consecutive.

DATE 27 March 2013		BP, Sunnyholt Rd, Kings Park										Grandtotal	Main Road Data		Grandtotal - Main Road
1-hour Data		Vehicles										1-hour Data	1-hour Data		1-hour Data
WEATHER Fine	TIME	IN					OUT					Vehicles	LV	HV	Vehicles
		light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
	6:00 to 7:00	27	8	0	0	35	26	7	0	0	33	68	466	67	533
	7:00 to 8:00	39	12	0	0	51	35	12	0	0	47	98	797	72	869
	8:00 to 9:00	31	8	0	1	40	24	8	0	1	33	73	887	118	1005
	9:00 to 10:00	39	9	0	2	50	37	9	0	2	48	98	957	141	1098
	10:00 to 11:00	36	5	0	0	41	32	5	0	0	37	78	1137	134	1271
	11:00 to 12:00	36	4	0	0	40	38	4	0	0	42	82	1163	121	1284
	12:00 to 13:00	37	10	0	0	47	33	8	0	0	41	88	1191	101	1292
	13:00 to 14:00	71	6	0	2	79	76	9	0	2	87	166	1364	110	1474
	14:00 to 15:00	70	12	0	0	82	78	10	0	0	88	170	1483	83	1566
	15:00 to 16:00	63	9	0	0	72	66	8	0	0	74	146	1521	78	1599
	16:00 to 17:00	67	5	0	0	72	68	5	0	0	73	145	1631	55	1686
	17:00 to 18:00	47	5	0	0	52	55	5	0	0	60	112	1702	38	1740
	18:00 to 19:00	34	0	0	0	34	40	1	0	0	41	75	1341	33	1374
	Total	597	93		5	695	608	91		5	704	1399	15640	1151	16791

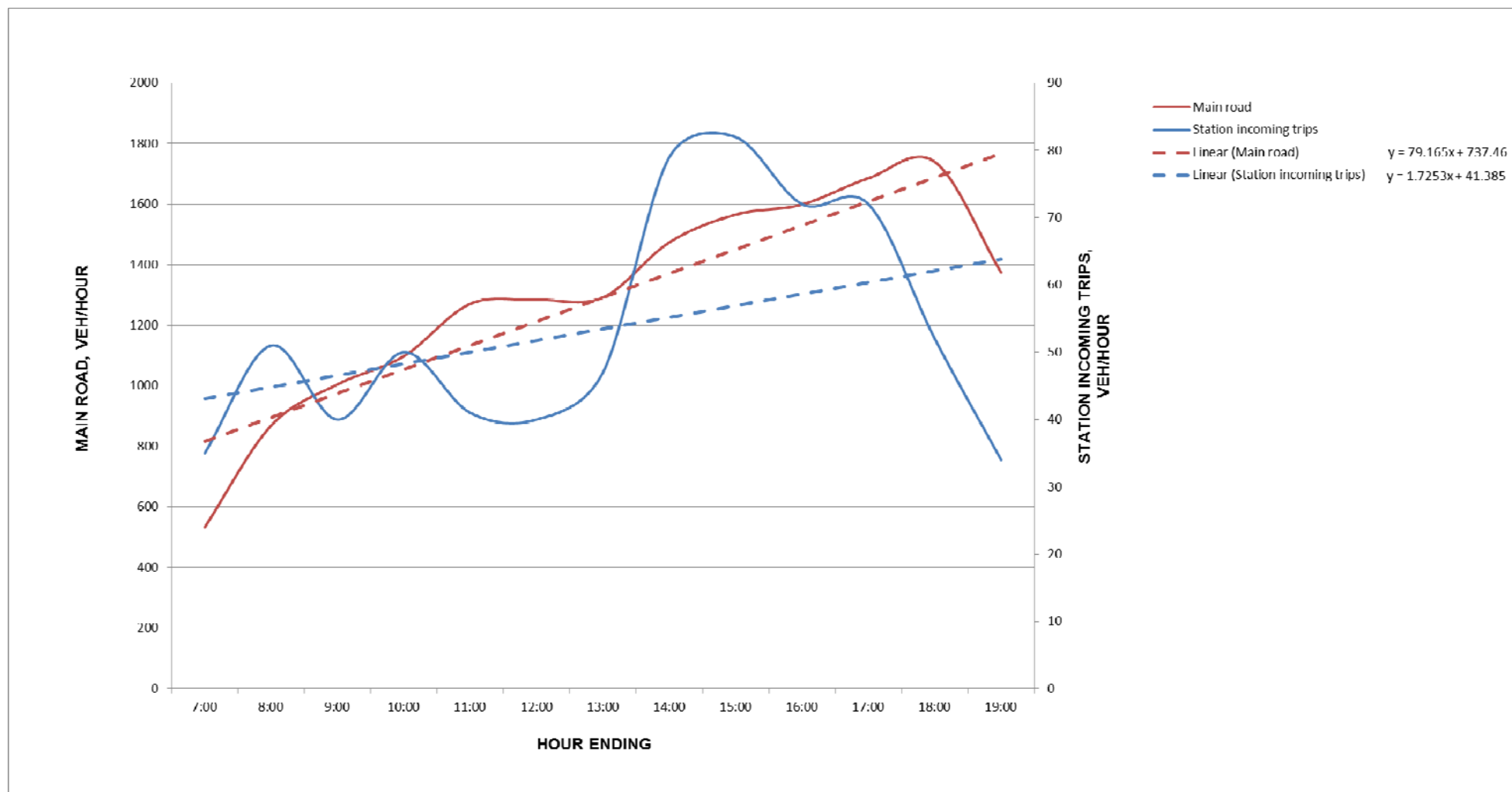


Figure 3.34 Site 6 BP, Sunnyholt Rd, Kings Park – Hourly trip distribution - vehicles.

3.1.7 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool

Table 3.50 Site 7 - Survey Results – 15-minute interval data.

DATE 27 March 2013 15 minute Data			Caltex-Woolworths, Orange Grove Rd, Liverpool										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
WEATHER Fine			Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
			IN					OUT												
TIME			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10
6:00	to	6:15	28	0	0	1	29	23	0	0	1	23	52	241	15	256	2	0	2	135.9
6:15	to	6:30	33	0	0	0	33	26	0	0	0	27	60	315	30	345	0	0	0	135.9
6:30	to	6:45	25	2	0	0	27	30	1	0	0	31	58	318	24	342	1	0	1	135.9
6:45	to	7:00	20	2	0	0	22	21	1	0	0	22	44	224	17	241	1	0	1	135.9
7:00	to	7:15	13	5	0	0	18	15	6	0	0	21	39	374	32	406	1	0	1	135.9
7:15	to	7:30	19	1	0	0	20	18	2	0	0	20	40	334	22	356	1	0	1	135.9
7:30	to	7:45	31	1	0	1	33	35	0	0	0	35	68	459	27	486	2	0	2	135.9
7:45	to	8:00	26	0	0	0	26	25	1	0	1	27	53	423	20	443	2	0	2	135.9
8:00	to	8:15	27	0	0	0	27	26	0	0	0	26	53	434	34	468	1	0	1	135.5
8:15	to	8:30	20	0	0	0	20	22	0	0	0	22	42	307	37	344	2	0	2	135.5
8:30	to	8:45	27	3	0	0	30	21	3	0	0	24	54	408	41	449	2	0	2	135.5
8:45	to	9:00	26	3	0	0	29	27	3	0	0	30	59	329	32	361	2	0	2	135.5
9:00	to	9:15	18	1	0	0	19	25	0	0	0	25	44	285	30	315	2	0	2	135.5
9:15	to	9:30	28	0	0	0	28	17	1	0	0	18	46	268	22	290	2	0	2	135.5
9:30	to	9:45	18	1	0	1	20	24	1	0	1	26	46	299	34	333	2	0	2	135.5
9:45	to	10:00	17	1	0	0	18	16	0	0	0	16	34	260	17	277	2	0	2	135.5
10:00	to	10:15	26	2	0	0	28	21	3	0	0	24	52	308	36	344	2	0	2	135.5
10:15	to	10:30	17	3	0	0	20	15	2	0	0	17	37	229	29	258	2	0	2	135.5
10:30	to	10:45	19	1	0	0	20	18	2	0	0	20	40	281	39	320	2	0	2	135.5
10:45	to	11:00	16	0	0	0	16	16	0	0	0	16	32	263	24	287	3	0	3	135.5
11:00	to	11:15	23	2	0	0	25	20	2	0	0	22	47	269	26	295	6	0	6	135.5
11:15	to	11:30	30	0	0	0	30	27	0	0	0	27	57	296	25	321	5	0	5	135.5
11:30	to	11:45	28	0	0	0	28	30	0	0	0	30	58	284	23	307	4	0	4	135.5
11:45	to	12:00	21	0	0	0	21	15	0	0	0	15	36	291	30	321	5	0	5	135.5
12:00	to	12:15	26	1	0	1	28	25	1	0	1	27	55	274	36	310	4	0	4	135.5
12:15	to	12:30	16	0	0	0	16	23	0	0	0	23	39	264	25	289	2	0	2	135.5
12:30	to	12:45	26	0	0	0	26	20	0	0	0	20	46	249	26	275	2	0	2	135.5
12:45	to	13:00	12	0	0	0	12	18	0	0	0	18	30	285	24	309	3	0	3	135.5
13:00	to	13:15	23	0	0	0	23	16	0	0	0	16	39	315	29	344	3	0	3	135.5
13:15	to	13:30	22	1	0	1	24	22	0	0	0	22	46	327	29	356	2	0	2	135.5
13:30	to	13:45	19	1	0	0	20	14	1	0	0	15	35	314	27	341	3	0	3	135.5
13:45	to	14:00	13	0	0	0	13	14	0	0	0	14	27	292	29	321	2	0	2	135.5
14:00	to	14:15	32	0	0	0	32	19	0	0	0	19	51	366	31	397	5	0	5	135.5
14:15	to	14:30	21	0	0	0	21	32	0	0	0	32	53	342	16	358	3	0	3	135.5
14:30	to	14:45	20	2	0	0	22	17	2	0	0	19	41	331	31	362	7	0	7	135.5
14:45	to	15:00	15	0	0	0	15	10	2	0	0	12	27	351	18	369	5	0	5	135.5
15:00	to	15:15	14	1	0	0	15	13	0	0	0	13	28	395	20	415	2	0	2	135.5
15:15	to	15:30	13	0	0	0	13	15	0	0	0	15	28	347	21	368	3	0	3	135.5
15:30	to	15:45	16	0	0	0	16	12	1	0	0	13	29	424	32	456	5	0	5	135.5
15:45	to	16:00	25	1	0	0	26	19	1	0	0	20	46	456	18	474	3	0	3	135.5
16:00	to	16:15	27	0	0	0	27	25	0	0	0	25	52	458	18	476	4	0	4	135.5
16:15	to	16:30	23	0	0	0	23	21	0	0	0	21	44	457	17	474	3	0	3	135.5
16:30	to	16:45	18	1	0	0	19	25	1	0	0	26	45	428	15	443	1	1	2	135.5
16:45	to	17:00	37	0	0	0	37	26	0	0	0	26	63	438	18	456	5	0	5	135.5
17:00	to	17:15	25	0	0	1	26	26	0	0	0	26	52	444	20	464	4	0	4	135.5
17:15	to	17:30	22	1	0	1	24	15	0	0	0	15	39	501	15	516	2	1	3	135.5
17:30	to	17:45	17	1	0	1	19	26	1	0	0	27	46	452	15	467	1	3	4	135.5
17:45	to	18:00	20	0	0	0	20	20	0	0	1	21	41	465	10	475	3	2	5	135.5
18:00	to	18:15	22	0	0	0	22	20	0	0	0	20	42	409	19	428	1	2	3	135.5
18:15	to	18:30	26	1	0	0	27	19	0	0	0	19	46	378	11	389	5	1	6	135.5
18:30	to	18:45	18	1	0	0	19	27	0	0	0	27	46	343	4	347	5	2	7	135.5
18:45	to	19:00	19	0	0	0	19	21	0	0	2	23	42	312	9	321	4	1	5	135.5
TOTAL			1143	40	0	8	1191	1093	38		7	1138	2329	17916	1249	19165				

Table 3.51 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013 1-hour Data			Caltex-Woolworths, Orange Grove Rd, Liverpool										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT								
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME			light	heavy	fast food			light	heavy	fast food						
6:00	to	7:00	106	4	0	1	111	100	2	0	1	103	214	1098	86	1184
6:15	to	7:15	91	9	0	0	100	92	8	0	1	101	201	1231	103	1334
6:30	to	7:30	77	10	0	0	87	84	10	0	0	94	181	1250	95	1345
6:45	to	7:45	83	9	0	1	93	89	9	0	0	98	191	1391	98	1489
7:00	to	8:00	89	7	0	1	97	93	9	0	1	103	200	1590	101	1691
7:15	to	8:15	103	2	0	1	106	104	3	0	1	108	214	1650	103	1753
7:30	to	8:30	104	1	0	1	106	108	1	0	1	110	216	1623	118	1741
7:45	to	8:45	100	3	0	0	103	94	4	0	1	99	202	1572	132	1704
8:00	to	9:00	100	6	0	0	106	96	6	0	0	102	208	1478	144	1622
8:15	to	9:15	91	7	0	0	98	95	6	0	0	101	199	1329	140	1469
8:30	to	9:30	99	7	0	0	106	90	7	0	0	97	203	1290	125	1415
8:45	to	9:45	90	5	0	1	96	93	5	0	1	99	195	1181	118	1299
9:00	to	10:00	81	3	0	1	85	82	2	0	1	85	170	1112	103	1215
9:15	to	10:15	89	4	0	1	94	78	5	0	1	84	178	1135	109	1244
9:30	to	10:30	78	7	0	1	86	76	6	0	1	83	169	1096	116	1212
9:45	to	10:45	79	7	0	0	86	70	7	0	0	77	163	1078	121	1199
10:00	to	11:00	78	6	0	0	84	70	7	0	0	77	161	1081	128	1209
10:15	to	11:15	75	6	0	0	81	69	6	0	0	75	156	1042	118	1160
10:30	to	11:30	88	3	0	0	91	81	4	0	0	85	176	1109	114	1223
10:45	to	11:45	97	2	0	0	99	93	2	0	0	95	194	1112	98	1210
11:00	to	12:00	102	2	0	0	104	92	2	0	0	94	198	1140	104	1244
11:15	to	12:15	105	1	0	1	107	97	1	0	1	99	206	1145	114	1259
11:30	to	12:30	91	1	0	1	93	93	1	0	1	95	188	1113	114	1227
11:45	to	12:45	89	1	0	1	91	83	1	0	1	85	176	1078	117	1195
12:00	to	13:00	80	1	0	1	82	86	1	0	1	88	170	1072	111	1183
12:15	to	13:15	77	0	0	0	77	77	0	0	0	77	154	1113	104	1217
12:30	to	13:30	83	1	0	1	85	76	0	0	0	76	161	1176	108	1284
12:45	to	13:45	76	2	0	1	79	70	1	0	0	71	150	1241	109	1350
13:00	to	14:00	77	2	0	1	80	66	1	0	0	67	147	1248	114	1362
13:15	to	14:15	86	2	0	1	89	69	1	0	0	70	159	1299	116	1415
13:30	to	14:30	85	1	0	0	86	79	1	0	0	80	166	1314	103	1417
13:45	to	14:45	86	2	0	0	88	82	2	0	0	84	172	1331	107	1438
14:00	to	15:00	88	2	0	0	90	78	4	0	0	82	172	1390	96	1486
14:15	to	15:15	70	3	0	0	73	72	4	0	0	76	149	1419	85	1504
14:30	to	15:30	62	3	0	0	65	55	4	0	0	59	124	1424	90	1514
14:45	to	15:45	58	1	0	0	59	50	3	0	0	53	112	1517	91	1608
15:00	to	16:00	68	2	0	0	70	59	2	0	0	61	131	1622	91	1713
15:15	to	16:15	81	1	0	0	82	71	2	0	0	73	155	1685	89	1774
15:30	to	16:30	91	1	0	0	92	77	2	0	0	79	171	1795	85	1880
15:45	to	16:45	93	2	0	0	95	90	2	0	0	92	187	1799	68	1867
16:00	to	17:00	105	1	0	0	106	97	1	0	0	98	204	1781	68	1849
16:15	to	17:15	103	1	0	1	105	98	1	0	0	99	204	1767	70	1837
16:30	to	17:30	102	2	0	2	106	92	1	0	0	93	199	1811	68	1879
16:45	to	17:45	101	2	0	3	106	93	1	0	0	94	200	1835	68	1903
17:00	to	18:00	84	2	0	3	89	87	1	0	1	89	178	1862	60	1922
17:15	to	18:15	81	2	0	2	85	81	1	0	1	83	168	1827	59	1886
17:30	to	18:30	85	2	0	1	88	85	1	0	1	87	175	1704	55	1759
17:45	to	18:45	86	2	0	0	88	86	0	0	1	87	175	1595	44	1639
18:00	to	19:00	85	2	0	0	87	87	0	0	2	89	176	1442	43	1485

Table 3.52 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	Vehicles		Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total		LV	HV	
AM														
7:30 to 8:30	104	1	0	1	106	108	1	0	1	110	216	1623	118	1741
PM														
16:00 to 17:00	105	1	0	0	106	97	1	0	0	98	204	1781	68	1849
16:15 to 17:15	103	1	0	1	105	98	1	0	0	99	204	1767	70	1837

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles					Customer vehicles					Vehicles	Vehicles		Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total		LV	HV	
AM														
7:15 to 8:15	103	2	0	1	106	104	3	0	1	108	214	1650	103	1753
PM														
17:00 to 18:00	84	2	0	3	89	87	1	0	1	89	178	1862	60	1922

Table 3.53 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool - Hourly data – consecutive.

Caltex-Woolworths, Orange Grove Rd, Liverpool												Grandtotal	Main Road Data		Grandtotal - Main Road
Vehicles												1-hour Data	1-hour Data		1-hour Data
WEATHER Fine TIME	IN					OUT						Vehicles	Vehicles		Vehicles
	Customer vehicles					Customer vehicles									
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total			LV	HV	
6:00 to 7:00	106	4	0	1	111	100	2	0	1	103	214	1098	86		1184
7:00 to 8:00	89	7	0	1	97	93	9	0	1	103	200	1590	101		1691
8:00 to 9:00	100	6	0	0	106	96	6	0	0	102	208	1478	144		1622
9:00 to 10:00	81	3	0	1	85	82	2	0	1	85	170	1112	103		1215
10:00 to 11:00	78	6	0	0	84	70	7	0	0	77	161	1081	128		1209
11:00 to 12:00	102	2	0	0	104	92	2	0	0	94	198	1140	104		1244
12:00 to 13:00	80	1	0	1	82	86	1	0	1	88	170	1072	111		1183
13:00 to 14:00	77	2	0	1	80	66	1	0	0	67	147	1248	114		1362
14:00 to 15:00	88	2	0	0	90	78	4	0	0	82	172	1390	96		1486
15:00 to 16:00	68	2	0	0	70	59	2	0	0	61	131	1622	91		1713
16:00 to 17:00	105	1	0	0	106	97	1	0	0	98	204	1781	68		1849
17:00 to 18:00	84	2	0	3	89	87	1	0	1	89	178	1862	60		1922
18:00 to 19:00	85	2	0	0	87	87	0	0	2	89	176	1442	43		1485
Total	1143	40		8	1191	1093	38		7	1138	2329	17916	1249		19165

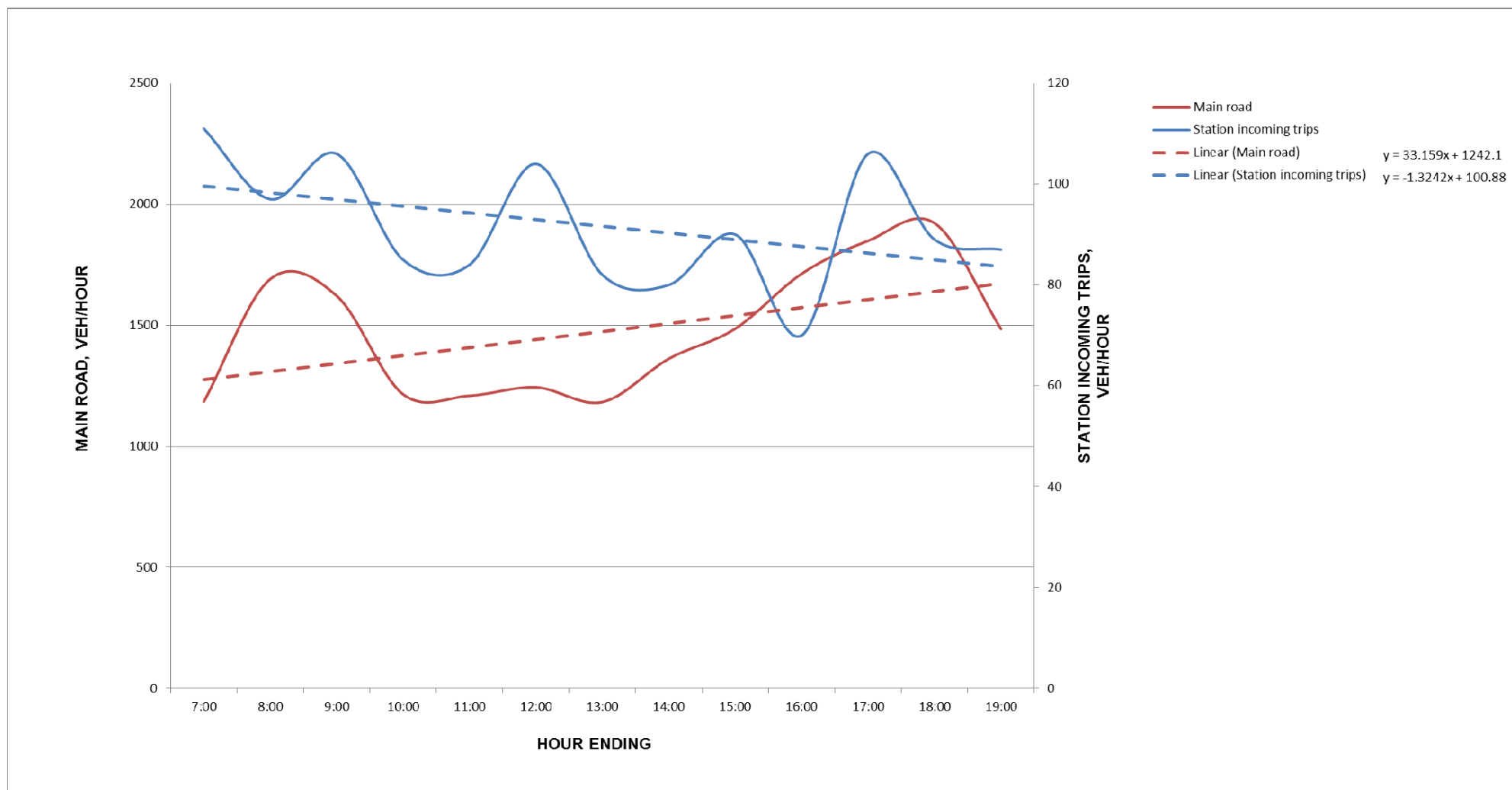


Figure 3.35 Site 7 Caltex – Woolworths, Orange Grove Rd, Liverpool – Hourly trip distribution - vehicles.

3.1.8 Site 8 Caltex – Woolworths, Woodland St, Riverstone

Table 3.54 Site 8 - Survey Results – 15-minute interval data.

DATE 27 March 2013 15 minute Data			Caltex - Woolworths, Woodland St, Riverstone										Grandtotal - site 15 minute Data	Main Road Data 15 minute Data		Grandtotal - Main Road 15 minute Data	On-site parking demand 15 minute Data			Petrol price 15 minute Data
			Vehicles																	
WEATHER Fine			IN					OUT												
			Customer vehicles			Service/Delivery		Total	Customer vehicles			Service/Delivery		Total						
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10
6:00	to	6:15	4	0	0	0	4	5	0	0	0	5	9	86	14	100	1	0	1	137.9
6:15	to	6:30	6	1	0	0	7	4	0	0	0	4	11	101	19	120	1	1	2	137.9
6:30	to	6:45	8	1	0	0	9	8	2	0	0	10	19	212	15	227	1	2	3	137.9
6:45	to	7:00	7	0	0	0	7	6	0	0	0	6	13	213	13	226	1	0	1	137.9
7:00	to	7:15	6	0	0	0	6	7	0	0	0	7	13	196	9	205	2	0	2	137.9
7:15	to	7:30	9	1	0	0	10	9	1	0	0	10	20	182	8	190	1	0	1	137.9
7:30	to	7:45	12	0	0	1	13	13	0	0	0	13	26	198	14	212	0	1	1	137.9
7:45	to	8:00	13	1	0	0	14	12	1	0	1	14	28	212	8	220	0	1	1	137.9
8:00	to	8:15	19	0	0	1	20	20	0	0	1	21	41	201	14	215	0	0	0	137.9
8:15	to	8:30	11	0	0	0	11	11	0	0	0	11	22	210	10	220	0	0	0	137.9
8:30	to	8:45	13	0	0	0	13	10	0	0	0	10	23	202	11	213	0	0	0	137.9
8:45	to	9:00	20	1	0	0	21	22	0	0	0	22	43	183	24	207	0	1	1	137.9
9:00	to	9:15	16	1	0	1	18	17	1	0	1	19	37	161	18	179	0	1	1	137.9
9:15	to	9:30	14	1	0	0	15	16	1	0	0	17	32	148	19	167	0	1	1	137.9
9:30	to	9:45	11	0	0	0	11	11	0	0	0	11	22	154	14	168	2	0	2	137.9
9:45	to	10:00	12	1	0	0	13	14	1	0	0	15	28	144	21	165	1	1	2	137.9
10:00	to	10:15	15	0	0	0	15	16	1	0	0	17	32	154	20	174	1	1	2	137.9
10:15	to	10:30	10	1	0	0	11	12	0	0	0	12	23	130	21	151	1	2	3	137.9
10:30	to	10:45	6	0	0	0	6	9	1	0	0	10	16	142	16	158	1	1	2	137.9
10:45	to	11:00	20	1	0	0	21	17	1	0	0	18	39	128	15	143	1	1	2	137.9
11:00	to	11:15	11	1	0	0	12	14	1	0	0	15	27	140	23	163	1	2	3	137.9
11:15	to	11:30	10	1	0	0	11	11	0	0	0	11	22	129	20	149	1	1	2	137.9
11:30	to	11:45	17	0	0	0	17	16	1	0	0	17	34	151	26	177	1	1	2	137.9
11:45	to	12:00	10	1	0	0	11	11	0	0	0	11	22	134	26	160	2	1	3	137.9
12:00	to	12:15	10	0	0	0	10	9	2	0	0	11	21	157	17	174	2	0	2	137.9
12:15	to	12:30	10	0	0	0	10	10	0	0	0	10	20	148	15	163	1	1	2	137.9
12:30	to	12:45	15	4	0	1	20	7	4	0	0	11	31	152	32	184	1	2	3	137.9
12:45	to	13:00	11	3	0	0	14	8	2	0	0	10	24	170	13	183	2	0	2	137.9
13:00	to	13:15	5	2	0	0	7	7	2	0	1	10	17	147	24	171	2	0	2	137.9
13:15	to	13:30	15	1	0	0	16	13	0	0	0	13	29	162	21	183	1	1	2	137.9
13:30	to	13:45	8	0	0	0	8	8	1	0	0	9	17	177	19	196	1	0	1	137.9
13:45	to	14:00	6	1	0	0	7	5	0	0	0	5	12	160	32	192	1	0	1	137.9
14:00	to	14:15	15	1	0	0	16	11	2	0	0	13	29	188	14	202	2	1	3	137.9
14:15	to	14:30	17	2	0	0	19	15	1	0	0	16	35	171	32	203	2	1	3	137.9
14:30	to	14:45	16	3	0	0	19	16	3	0	0	19	38	191	15	206	1	1	2	137.9
14:45	to	15:00	12	0	0	0	12	11	1	0	0	12	24	200	30	230	2	0	2	137.9
15:00	to	15:15	21	1	0	0	22	23	1	0	0	24	46	232	20	252	2	1	3	137.9
15:15	to	15:30	10	2	0	0	12	14	2	0	0	16	28	254	35	289	1	0	1	137.9
15:30	to	15:45	16	2	0	0	18	12	0	0	0	12	30	303	16	319	1	2	3	137.9
15:45	to	16:00	16	1	0	0	17	16	2	0	0	18	35	324	23	347	1	1	2	137.9
16:00	to	16:15	19	1	0	0	20	19	1	0	0	20	40	269	20	289	1	2	3	137.9
16:15	to	16:30	21	0	0	0	21	19	0	0	0	19	40	309	22	331	2	1	3	137.9
16:30	to	16:45	19	0	0	0	19	17	0	0	0	17	36	303	21	324	0	0	0	137.9
16:45	to	17:00	19	2	0	0	21	21	1	0	0	22	43	315	17	332	1	3	4	137.9
17:00	to	17:15	17	3	0	0	20	21	1	0	0	22	42	376	12	388	2	2	4	137.9
17:15	to	17:30	14	2	0	0	16	13	4	0	0	17	33	312	9	321	3	2	5	137.9
17:30	to	17:45	14	2	0	0	16	19	1	0	0	20	36	335	8	343	1	2	3	137.9
17:45	to	18:00	15	0	0	0	15	16	1	0	0	17	32	343	5	348	1	0	1	137.9
18:00	to	18:15	12	0	0	0	12	14	1	0	0	15	27	272	10	282	2	2	4	137.9
18:15	to	18:30	22	0	0	0	22	23	0	0	0	23	45	273	7	280	1	0	1	137.9
18:30	to	18:45	18	1	0	0	19	11	1	0	0	12	31	233	11	244	2	0	2	137.9
18:45	to	19:00	15	0	0	0	15	14	0	0	0	14	29	122	7	129	2	0	2	137.9
TOTAL			688	47	0	4	739	683	46		4	733	1472	10509	905	11414				

Table 3.55 Site 8 Caltex – Woolworths, Woodland St, Riverstone - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013 1-hour Data			Caltex - Woolworths, Woodland St, Riverstone										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT								
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME			light	heavy	fast food			light	heavy	fast food						
6:00	to	7:00	25	2	0	0	27	23	2	0	0	25	52	612	61	673
6:15	to	7:15	27	2	0	0	29	25	2	0	0	27	56	722	56	778
6:30	to	7:30	30	2	0	0	32	30	3	0	0	33	65	803	45	848
6:45	to	7:45	34	1	0	1	36	35	1	0	0	36	72	789	44	833
7:00	to	8:00	40	2	0	1	43	41	2	0	1	44	87	788	39	827
7:15	to	8:15	53	2	0	2	57	54	2	0	2	58	115	793	44	837
7:30	to	8:30	55	1	0	2	58	56	1	0	2	59	117	821	46	867
7:45	to	8:45	56	1	0	1	58	53	1	0	2	56	114	825	43	868
8:00	to	9:00	63	1	0	1	65	63	0	0	1	64	129	796	59	855
8:15	to	9:15	60	2	0	1	63	60	1	0	1	62	125	756	63	819
8:30	to	9:30	63	3	0	1	67	65	2	0	1	68	135	694	72	766
8:45	to	9:45	61	3	0	1	65	66	2	0	1	69	134	646	75	721
9:00	to	10:00	53	3	0	1	57	58	3	0	1	62	119	607	72	679
9:15	to	10:15	52	2	0	0	54	57	3	0	0	60	114	600	74	674
9:30	to	10:30	48	2	0	0	50	53	2	0	0	55	105	582	76	658
9:45	to	10:45	43	2	0	0	45	51	3	0	0	54	99	570	78	648
10:00	to	11:00	51	2	0	0	53	54	3	0	0	57	110	554	72	626
10:15	to	11:15	47	3	0	0	50	52	3	0	0	55	105	540	75	615
10:30	to	11:30	47	3	0	0	50	51	3	0	0	54	104	539	74	613
10:45	to	11:45	58	3	0	0	61	58	3	0	0	61	122	548	84	632
11:00	to	12:00	48	3	0	0	51	52	2	0	0	54	105	554	95	649
11:15	to	12:15	47	2	0	0	49	47	3	0	0	50	99	571	89	660
11:30	to	12:30	47	1	0	0	48	46	3	0	0	49	97	590	84	674
11:45	to	12:45	45	5	0	1	51	37	6	0	0	43	94	591	90	681
12:00	to	13:00	46	7	0	1	54	34	8	0	0	42	96	627	77	704
12:15	to	13:15	41	9	0	1	51	32	8	0	1	41	92	617	84	701
12:30	to	13:30	46	10	0	1	57	35	8	0	1	44	101	631	90	721
12:45	to	13:45	39	6	0	0	45	36	5	0	1	42	87	656	77	733
13:00	to	14:00	34	4	0	0	38	33	3	0	1	37	75	646	96	742
13:15	to	14:15	44	3	0	0	47	37	3	0	0	40	87	687	86	773
13:30	to	14:30	46	4	0	0	50	39	4	0	0	43	93	696	97	793
13:45	to	14:45	54	7	0	0	61	47	6	0	0	53	114	710	93	803
14:00	to	15:00	60	6	0	0	66	53	7	0	0	60	126	750	91	841
14:15	to	15:15	66	6	0	0	72	65	6	0	0	71	143	794	97	891
14:30	to	15:30	59	6	0	0	65	64	7	0	0	71	136	877	100	977
14:45	to	15:45	59	5	0	0	64	60	4	0	0	64	128	989	101	1090
15:00	to	16:00	63	6	0	0	69	65	5	0	0	70	139	1113	94	1207
15:15	to	16:15	61	6	0	0	67	61	5	0	0	66	133	1150	94	1244
15:30	to	16:30	72	4	0	0	76	66	3	0	0	69	145	1205	81	1286
15:45	to	16:45	75	2	0	0	77	71	3	0	0	74	151	1205	86	1291
16:00	to	17:00	78	3	0	0	81	76	2	0	0	78	159	1196	80	1276
16:15	to	17:15	76	5	0	0	81	78	2	0	0	80	161	1303	72	1375
16:30	to	17:30	69	7	0	0	76	72	6	0	0	78	154	1306	59	1365
16:45	to	17:45	64	9	0	0	73	74	7	0	0	81	154	1338	46	1384
17:00	to	18:00	60	7	0	0	67	69	7	0	0	76	143	1366	34	1400
17:15	to	18:15	55	4	0	0	59	62	7	0	0	69	128	1262	32	1294
17:30	to	18:30	63	2	0	0	65	72	3	0	0	75	140	1223	30	1253
17:45	to	18:45	67	1	0	0	68	64	3	0	0	67	135	1121	33	1154
18:00	to	19:00	67	1	0	0	68	62	2	0	0	64	132	900	35	935

Table 3.56 Site 8 Caltex – Woolworths, Woodland St, Riverstone - Peak hours.

Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Site activity			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
8:30	to	9:30	63	3	0	1	67	65	2	0	1	68	135	694	72	766
PM																
16:15	to	17:15	76	5	0	0	81	78	2	0	0	80	161	1303	72	1375

Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Frontage Road			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
7:45	to	8:45	56	1	0	1	58	53	1	0	2	56	114	825	43	868
PM																
17:00	to	18:00	60	7	0	0	67	69	7	0	0	76	143	1366	34	1400

Table 3.57 Site 8 Caltex – Woolworths, Woodland St, Riverstone - Hourly data – consecutive.

DATE 27 March 2013 1-hour Data			Caltex - Woolworths, Woodland St, Riverstone										Grandtotal	Main Road Data		Grandtotal - Main Road		
			Vehicles										1-hour Data					
WEATHER Fine			IN					OUT						1-hour Data		1-hour Data		
			Customer vehicles			Service/Delivery		Total	Customer vehicles			Service/Delivery					Total	
TIME			light	heavy	fast food	Service/Delivery		Total	light	heavy	fast food	Service/Delivery		Total	Vehicles	LV	HV	Vehicles
6:00	to	7:00	25	2	0	0		27	23	2	0	0		25	52	612	61	673
7:00	to	8:00	40	2	0	1		43	41	2	0	1		44	87	788	39	827
8:00	to	9:00	63	1	0	1		65	63	0	0	1		64	129	796	59	855
9:00	to	10:00	53	3	0	1		57	58	3	0	1		62	119	607	72	679
10:00	to	11:00	51	2	0	0		53	54	3	0	0		57	110	554	72	626
11:00	to	12:00	48	3	0	0		51	52	2	0	0		54	105	554	95	649
12:00	to	13:00	46	7	0	1		54	34	8	0	0		42	96	627	77	704
13:00	to	14:00	34	4	0	0		38	33	3	0	1		37	75	646	96	742
14:00	to	15:00	60	6	0	0		66	53	7	0	0		60	126	750	91	841
15:00	to	16:00	63	6	0	0		69	65	5	0	0		70	139	1113	94	1207
16:00	to	17:00	78	3	0	0		81	76	2	0	0		78	159	1196	80	1276
17:00	to	18:00	60	7	0	0		67	69	7	0	0		76	143	1366	34	1400
18:00	to	19:00	67	1	0	0		68	62	2	0	0		64	132	900	35	935
Total			688	47		4		739	683	46		4		733	1472	10509	905	11414

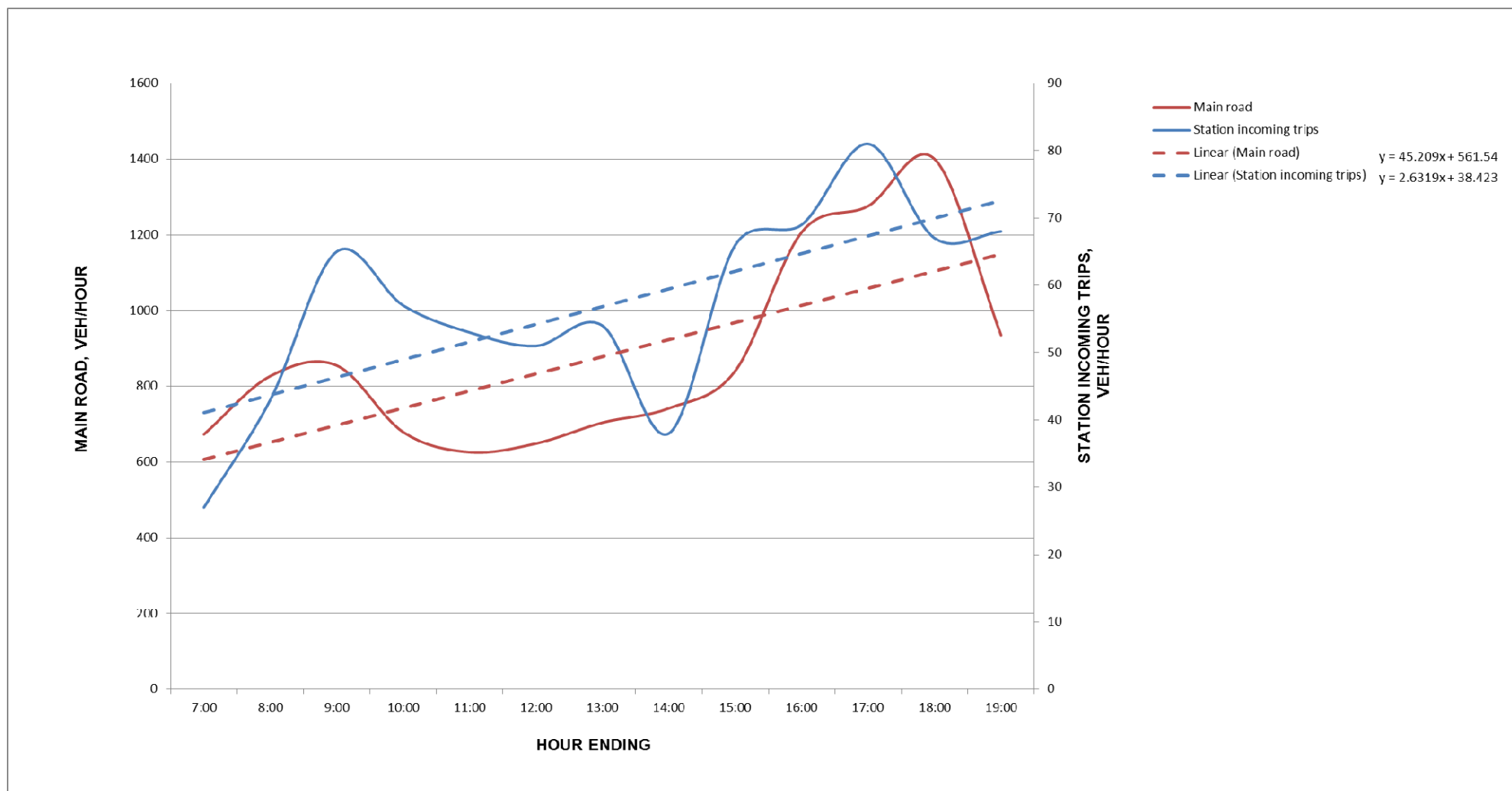


Figure 3.36 Site 8 Caltex – Woolworths, Woodland St, Riverstone – Hourly trip distribution - vehicles.

3.1.9 Site 9 7-Eleven, Hume Highway, Bargo

Table 3.58 Site 9 - Survey Results – 15-minute interval data.

DATE 27 March 2013 15 minute Data			7-Eleven, Hume Highway, Bargo											Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
WEATHER Fine			Vehicles											15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
			IN					OUT													
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10	
6:00	to	6:15	13	10	0	1	24	14	5	0	0	19	43	132	39	171	15	11	26	144.9	
6:15	to	6:30	20	7	0	1	28	19	9	0	2	30	58	151	35	186	17	14	31	144.9	
6:30	to	6:45	19	9	0	0	28	20	10	0	0	30	58	163	40	203	18	23	41	144.9	
6:45	to	7:00	24	10	0	0	34	22	13	0	0	35	69	158	44	202	18	25	43	144.9	
7:00	to	7:15	21	7	0	1	29	27	12	0	0	39	68	180	34	214	18	20	38	144.9	
7:15	to	7:30	27	10	0	0	37	20	9	0	1	30	67	178	42	220	18	21	39	144.9	
7:30	to	7:45	27	9	0	0	36	21	7	0	0	28	64	214	36	250	18	25	43	144.9	
7:45	to	8:00	21	6	0	1	28	23	9	0	1	33	61	202	40	242	17	25	42	144.9	
8:00	to	8:15	16	7	0	0	23	18	8	0	0	26	49	181	42	223	16	23	39	144.9	
8:15	to	8:30	12	4	0	0	16	17	10	0	0	27	43	200	31	231	18	23	41	144.9	
8:30	to	8:45	13	7	0	0	20	17	14	0	0	31	51	196	37	233	15	26	41	144.9	
8:45	to	9:00	16	7	0	1	24	19	15	0	1	35	59	208	27	235	17	27	44	144.9	
9:00	to	9:15	20	10	0	0	30	21	12	0	0	33	63	195	38	233	20	29	49	144.9	
9:15	to	9:30	18	12	0	0	30	22	9	0	0	31	61	174	39	213	19	25	44	144.9	
9:30	to	9:45	15	8	0	1	24	19	7	0	0	26	50	183	42	225	17	23	40	144.9	
9:45	to	10:00	13	6	0	0	19	18	8	0	0	26	45	143	38	181	17	28	45	144.9	
10:00	to	10:15	15	7	0	0	22	16	8	0	1	25	47	150	30	180	20	26	46	144.9	
10:15	to	10:30	15	5	0	0	20	16	4	0	0	20	40	165	38	203	18	32	50	144.9	
10:30	to	10:45	11	4	0	0	15	14	5	0	0	19	34	176	48	224	18	27	45	144.9	
10:45	to	11:00	14	6	0	0	20	15	3	0	0	18	38	185	44	229	18	25	43	144.9	
11:00	to	11:15	17	6	0	0	23	20	7	0	1	28	51	175	41	216	16	29	45	144.9	
11:15	to	11:30	20	7	0	1	28	24	9	0	1	34	62	173	46	219	18	28	46	144.9	
11:30	to	11:45	20	7	0	0	27	24	9	0	0	33	60	192	37	229	18	29	47	144.9	
11:45	to	12:00	20	8	0	0	28	24	8	0	0	32	60	190	46	236	18	28	46	144.9	
12:00	to	12:15	17	5	0	0	22	19	7	0	0	26	48	163	49	212	19	24	43	144.9	
12:15	to	12:30	16	6	0	1	23	24	3	0	0	27	50	160	42	202	18	27	45	144.9	
12:30	to	12:45	34	5	0	0	39	31	7	0	1	39	78	167	40	207	18	20	38	146.9	
12:45	to	13:00	23	10	0	1	34	45	5	0	1	51	85	144	49	193	18	25	43	146.9	
13:00	to	13:15	29	7	0	0	36	29	3	0	0	32	68	161	43	204	18	21	39	146.9	
13:15	to	13:30	24	5	0	0	29	24	8	0	0	32	61	147	36	183	18	20	38	146.9	
13:30	to	13:45	27	6	0	0	33	20	6	0	0	26	59	189	54	243	18	25	43	146.9	
13:45	to	14:00	29	5	0	0	34	28	9	0	0	37	71	171	47	218	18	27	45	146.9	
14:00	to	14:15	33	5	0	1	39	39	5	0	1	45	84	184	37	221	18	27	45	146.9	
14:15	to	14:30	32	4	0	0	36	32	6	0	0	38	74	176	46	222	17	28	45	146.9	
14:30	to	14:45	42	4	0	0	46	31	7	0	0	38	84	150	52	202	16	27	43	146.9	
14:45	to	15:00	20	3	0	1	24	29	6	0	0	35	59	121	54	175	15	21	36	146.9	
15:00	to	15:15	31	4	0	1	36	33	4	0	2	39	75	190	42	232	16	19	35	146.9	
15:15	to	15:30	27	4	0	0	31	30	4	0	0	34	65	194	42	236	14	18	32	146.9	
15:30	to	15:45	22	4	0	0	26	27	3	0	0	30	56	214	39	253	15	24	39	146.9	
15:45	to	16:00	16	2	0	1	19	19	2	0	0	21	40	250	33	283	14	25	39	146.9	
16:00	to	16:15	36	4	0	0	40	39	0	0	1	40	80	211	43	254	14	23	37	146.9	
16:15	to	16:30	23	5	0	0	28	27	2	0	0	29	57	200	50	250	17	21	38	146.9	
16:30	to	16:45	32	4	0	0	36	34	3	0	0	37	73	230	38	268	18	31	49	146.9	
16:45	to	17:00	24	2	0	0	26	30	3	0	0	33	59	218	30	248	18	34	52	146.9	
17:00	to	17:15	43	2	0	0	45	42	4	0	0	46	91	196	26	222	12	27	39	146.9	
17:15	to	17:30	42	1	0	1	44	40	1	0	1	42	86	245	41	286	14	25	39	146.9	
17:30	to	17:45	23	7	0	0	30	32	3	0	0	35	65	236	32	268	17	18	35	146.9	
17:45	to	18:00	39	1	0	0	40	28	8	0	0	36	76	251	40	291	16	22	38	146.9	
18:00	to	18:15	30	0	0	1	31	38	2	0	0	40	71	193	29	222	16	19	35	146.9	
18:15	to	18:30	39	4	0	0	43	37	3	0	1	41	84	227	46	273	14	17	31	146.9	
18:30	to	18:45	33	2	0	0	35	32	3	0	0	35	70	180	26	206	14	19	33	146.9	
18:45	to	19:00	21	2	0	1	24	37	2	0	1	40	64	193	47	240	13	23	36	146.9	
TOTAL			1234	292	0	16	1542	1346	329		17	1692	3234	9625	2087	11712					

Table 3.59 Site 9 7-Eleven, Hume Highway, Bargo - Survey Results – Hourly data - rolling at 15 minute intervals.

DATE 27 March 2013 1-hour Data			7-Eleven, Hume Highway, Bargo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT								
			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
TIME			light	heavy	fast food			light	heavy	fast food						
6:00	to	7:00	76	36	0	2	114	75	37	0	2	114	228	604	158	762
6:15	to	7:15	84	33	0	2	119	88	44	0	2	134	253	652	153	805
6:30	to	7:30	91	36	0	1	128	89	44	0	1	134	262	679	160	839
6:45	to	7:45	99	36	0	1	136	90	41	0	1	132	268	730	156	886
7:00	to	8:00	96	32	0	2	130	91	37	0	2	130	260	774	152	926
7:15	to	8:15	91	32	0	1	124	82	33	0	2	117	241	775	160	935
7:30	to	8:30	76	26	0	1	103	79	34	0	1	114	217	797	149	946
7:45	to	8:45	62	24	0	1	87	75	41	0	1	117	204	779	150	929
8:00	to	9:00	57	25	0	1	83	71	47	0	1	119	202	785	137	922
8:15	to	9:15	61	28	0	1	90	74	51	0	1	126	216	799	133	932
8:30	to	9:30	67	36	0	1	104	79	50	0	1	130	234	773	141	914
8:45	to	9:45	69	37	0	2	108	81	43	0	1	125	233	760	146	906
9:00	to	10:00	66	36	0	1	103	80	36	0	0	116	219	695	157	852
9:15	to	10:15	61	33	0	1	95	75	32	0	1	108	203	650	149	799
9:30	to	10:30	58	26	0	1	85	69	27	0	1	97	182	641	148	789
9:45	to	10:45	54	22	0	0	76	64	25	0	1	90	166	634	154	788
10:00	to	11:00	55	22	0	0	77	61	20	0	1	82	159	676	160	836
10:15	to	11:15	57	21	0	0	78	65	19	0	1	85	163	701	171	872
10:30	to	11:30	62	23	0	1	86	73	24	0	2	99	185	709	179	888
10:45	to	11:45	71	26	0	1	98	83	28	0	2	113	211	725	168	893
11:00	to	12:00	77	28	0	1	106	92	33	0	2	127	233	730	170	900
11:15	to	12:15	77	27	0	1	105	91	33	0	1	125	230	718	178	896
11:30	to	12:30	73	26	0	1	100	91	27	0	0	118	218	705	174	879
11:45	to	12:45	87	24	0	1	112	98	25	0	1	124	236	680	177	857
12:00	to	13:00	90	26	0	2	118	119	22	0	2	143	261	634	180	814
12:15	to	13:15	102	28	0	2	132	129	18	0	2	149	281	632	174	806
12:30	to	13:30	110	27	0	1	138	129	23	0	2	154	292	619	168	787
12:45	to	13:45	103	28	0	1	132	118	22	0	1	141	273	641	182	823
13:00	to	14:00	109	23	0	0	132	101	26	0	0	127	259	668	180	848
13:15	to	14:15	113	21	0	1	135	111	28	0	1	140	275	691	174	865
13:30	to	14:30	121	20	0	1	142	119	26	0	1	146	288	720	184	904
13:45	to	14:45	136	18	0	1	155	130	27	0	1	158	313	681	182	863
14:00	to	15:00	127	16	0	2	145	131	24	0	1	156	301	631	189	820
14:15	to	15:15	125	15	0	2	142	125	23	0	2	150	292	637	194	831
14:30	to	15:30	120	15	0	2	137	123	21	0	2	146	283	655	190	845
14:45	to	15:45	100	15	0	2	117	119	17	0	2	138	255	719	177	896
15:00	to	16:00	96	14	0	2	112	109	13	0	2	124	236	848	156	1004
15:15	to	16:15	101	14	0	1	116	115	9	0	1	125	241	869	157	1026
15:30	to	16:30	97	15	0	1	113	112	7	0	1	120	233	875	165	1040
15:45	to	16:45	107	15	0	1	123	119	7	0	1	127	250	891	164	1055
16:00	to	17:00	115	15	0	0	130	130	8	0	1	139	269	859	161	1020
16:15	to	17:15	122	13	0	0	135	133	12	0	0	145	280	844	144	988
16:30	to	17:30	141	9	0	1	151	146	11	0	1	158	309	889	135	1024
16:45	to	17:45	132	12	0	1	145	144	11	0	1	156	301	895	129	1024
17:00	to	18:00	147	11	0	1	159	142	16	0	1	159	318	928	139	1067
17:15	to	18:15	134	9	0	2	145	138	14	0	1	153	298	925	142	1067
17:30	to	18:30	131	12	0	1	144	135	16	0	1	152	296	907	147	1054
17:45	to	18:45	141	7	0	1	149	135	16	0	1	152	301	851	141	992
18:00	to	19:00	123	8	0	2	133	144	10	0	2	156	289	793	148	941

Table 3.60 Site 9 7-Eleven, Hume Highway, Bargo - Peak hours.

Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Site activity			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
6:45	to	7:45	99	36	0	1	136	90	41	0	1	132	268	730	156	886
PM																
17:00	to	18:00	147	11	0	1	159	142	16	0	1	159	318	928	139	1067

Peak hour			Vehicles									Grandtotal	Main Road Data		Grandtotal - Main Road	
Frontage Road			IN					OUT					1-hour Data	1-hour Data		1-hour Data
			Customer vehicles					Customer vehicles								
TIME			light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total	Vehicles	LV	HV	Vehicles
AM																
7:30	to	8:30	76	26	0	1	103	79	34	0	1	114	217	797	149	946
PM																
17:00	to	18:00	147	11	0	1	159	142	16	0	1	159	318	928	139	1067

Table 3.61 Site 9 7-Eleven, Hume Highway, Bargo - Hourly data – consecutive.

DATE 27 March 2013 1-hour Data	7-Eleven, Hume Highway, Bargo										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine TIME	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
	light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total				
6:00 to 7:00	76	36	0	2	114	75	37	0	2	114	228	604	158	762
7:00 to 8:00	96	32	0	2	130	91	37	0	2	130	260	774	152	926
8:00 to 9:00	57	25	0	1	83	71	47	0	1	119	202	785	137	922
9:00 to 10:00	66	36	0	1	103	80	36	0	0	116	219	695	157	852
10:00 to 11:00	55	22	0	0	77	61	20	0	1	82	159	676	160	836
11:00 to 12:00	77	28	0	1	106	92	33	0	2	127	233	730	170	900
12:00 to 13:00	90	26	0	2	118	119	22	0	2	143	261	634	180	814
13:00 to 14:00	109	23	0	0	132	101	26	0	0	127	259	668	180	848
14:00 to 15:00	127	16	0	2	145	131	24	0	1	156	301	631	189	820
15:00 to 16:00	96	14	0	2	112	109	13	0	2	124	236	848	156	1004
16:00 to 17:00	115	15	0	0	130	130	8	0	1	139	269	859	161	1020
17:00 to 18:00	147	11	0	1	159	142	16	0	1	159	318	928	139	1067
18:00 to 19:00	123	8	0	2	133	144	10	0	2	156	289	793	148	941
Total	1234	292		16	1542	1346	329		17	1692	3234	9625	2087	11712

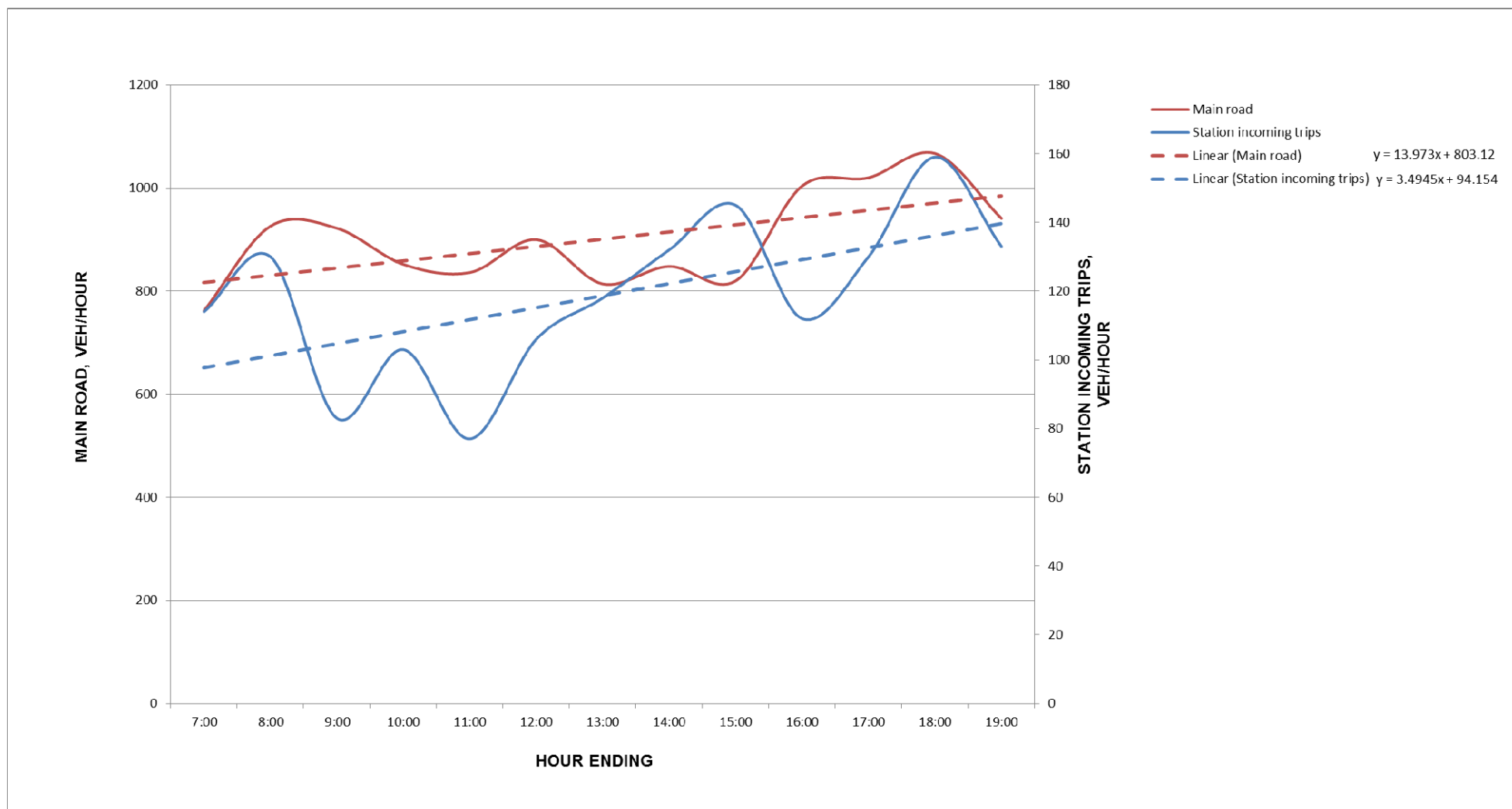


Figure 3.37 Site 9 7-Eleven, Hume Highway, Bargo – Hourly trip distribution - vehicles.

3.1.10 Site 10 BP, Moorefields Rd, Kingsgrove

Table 3.62 Site 10 - Survey Results – 15-minute interval data.

21-May-2013 15 minute Data		BP, Moorefields Rd, Kingsgrove										Grandtotal - site	Main Road Data		Grandtotal - Main Road	On-site parking demand			Petrol price
WEATHER Fine		Vehicles										15 minute Data	15 minute Data		15 minute Data	15 minute Data			15 minute Data
		IN					OUT					Vehicles	LV	HV	Vehicles	Formal	Informal	Total	E10
TIME		light	heavy	fast food	Service/Delivery	Total	light	heavy	fast food	Service/Delivery	Total								
6:00 to 6:15		4	1	0	0	5	3	1	0	0	4	9	29	1	30	1	0	1	144.9
6:15 to 6:30		4	1	0	0	5	5	1	0	0	6	11	21	5	26	1	0	1	144.9
6:30 to 6:45		4	1	0	0	5	4	0	0	0	4	9	31	5	36	1	0	1	144.9
6:45 to 7:00		8	0	0	0	8	4	1	0	0	5	13	46	2	48	2	0	2	144.9
7:00 to 7:15		8	0	0	0	8	8	0	0	0	8	16	43	8	51	2	0	2	147.9
7:15 to 7:30		5	1	0	1	7	8	1	0	1	10	17	72	4	76	1	0	1	147.9
7:30 to 7:45		5	1	0	1	7	7	0	0	1	8	15	80	3	83	1	0	1	147.9
7:45 to 8:00		7	0	0	0	7	5	0	0	0	5	12	112	6	118	1	0	1	147.9
8:00 to 8:15		11	0	0	0	11	10	0	0	0	10	21	96	7	103	1	0	1	147.9
8:15 to 8:30		5	1	0	0	6	5	1	0	0	6	12	113	8	121	1	0	1	147.9
8:30 to 8:45		2	1	0	1	4	2	0	0	0	2	6	158	10	168	1	0	1	147.9
8:45 to 9:00		10	1	0	0	11	8	1	0	0	9	20	158	9	167	1	0	1	147.9
9:00 to 9:15		7	0	0	0	7	8	0	0	0	8	15	78	6	84	1	0	1	147.9
9:15 to 9:30		4	0	0	1	5	3	0	0	1	4	9	62	7	69	1	0	1	147.9
9:30 to 9:45		9	0	0	0	9	5	0	0	1	6	15	56	6	62	1	0	1	147.9
9:45 to 10:00		5	0	0	0	5	5	0	0	0	5	10	112	13	125	1	0	1	147.9
10:00 to 10:15		7	0	0	0	7	2	0	0	0	2	9	78	9	87	2	0	2	147.9
10:15 to 10:30		5	1	0	1	7	9	1	0	0	10	17	86	6	92	2	0	2	145.9
10:30 to 10:45		3	1	0	0	4	2	1	0	1	4	8	79	7	86	3	0	3	145.9
10:45 to 11:00		3	1	0	1	5	2	1	0	1	4	9	83	7	90	2	0	2	145.9
11:00 to 11:15		6	0	0	0	6	5	0	0	0	5	11	88	5	93	2	0	2	145.9
11:15 to 11:30		3	1	0	0	4	5	0	0	0	5	9	93	7	100	2	0	2	145.9
11:30 to 11:45		4	0	0	0	4	2	1	0	0	3	7	97	7	104	2	0	2	145.9
11:45 to 12:00		5	0	0	0	5	4	0	0	0	4	9	86	7	93	1	0	1	145.9
12:00 to 12:15		2	0	0	0	2	2	0	0	0	2	4	76	9	85	1	0	1	145.9
12:15 to 12:30		9	0	0	0	9	9	0	0	0	9	18	151	11	162	2	0	2	145.9
12:30 to 12:45		4	0	0	0	4	8	0	0	0	8	12	80	3	83	1	0	1	145.9
12:45 to 13:00		6	0	0	0	6	5	0	0	0	5	11	85	2	87	1	0	1	145.9
13:00 to 13:15		4	0	0	0	4	4	0	0	0	4	8	83	10	93	1	0	1	145.9
13:15 to 13:30		5	0	0	0	5	6	0	0	0	6	11	84	7	91	0	0	0	145.9
13:30 to 13:45		6	0	0	0	6	6	0	0	0	6	12	90	10	100	0	0	0	145.9
13:45 to 14:00		5	0	0	0	5	3	0	0	0	3	8	99	4	103	0	0	0	145.9
14:00 to 14:15		2	0	0	0	2	3	0	0	0	3	5	117	8	125	0	0	0	145.9
14:15 to 14:30		8	0	0	0	8	7	0	0	0	7	15	120	12	132	0	0	0	145.9
14:30 to 14:45		7	0	0	0	7	5	0	0	0	5	12	141	8	149	2	0	2	145.9
14:45 to 15:00		8	0	0	0	8	10	0	0	0	10	18	134	4	138	0	0	0	145.9
15:00 to 15:15		10	0	0	0	10	9	0	0	0	9	19	187	8	195	0	0	0	145.9
15:15 to 15:30		9	0	0	0	9	10	0	0	0	10	19	183	7	190	0	0	0	145.9
15:30 to 15:45		12	0	0	0	12	10	0	0	0	10	22	203	5	208	0	0	0	145.9
15:45 to 16:00		9	1	0	0	10	10	1	0	0	11	21	232	5	237	0	0	0	145.9
16:00 to 16:15		8	0	0	0	8	5	0	0	0	5	13	237	6	243	0	0	0	145.9
16:15 to 16:30		8	0	0	0	8	12	0	0	0	12	20	255	7	262	0	0	0	145.9
16:30 to 16:45		12	0	0	0	12	12	0	0	0	12	24	223	7	230	0	0	0	145.9
16:45 to 17:00		4	0	0	0	4	4	0	0	0	4	8	205	1	206	0	0	0	145.9
17:00 to 17:15		4	0	0	0	4	5	0	0	0	5	9	271	5	276	1	0	1	145.9
17:15 to 17:30		17	0	0	0	17	19	0	0	0	19	36	239	6	245	1	0	1	145.9
17:30 to 17:45		7	0	0	0	7	10	0	0	0	10	17	225	8	233	0	0	0	145.9
17:45 to 18:00		10	0	0	0	10	6	0	0	0	6	16	240	2	242	1	0	1	145.9
18:00 to 18:15		15	0	0	0	15	11	0	0	0	11	26	234	5	239	1	0	1	145.9
18:15 to 18:30		13	1	0	0	14	10	1	0	0	11	25	157	0	157	4	0	4	145.9
18:30 to 18:45		3	0	0	0	3	5	0	0	0	5	8	150	5	155	1	0	1	145.9
18:45 to 19:00		7	0	0	0	7	7	0	0	0	7	14	144	3	147	1	0	1	145.9
TOTAL		348	14	0	6	368	334	12		6	352	720	6602	323	6925				

Table 3.63 Site 10 BP, Moorefields Rd, Kingsgrove - Survey Results – Hourly data - rolling at 15 minute intervals.

21-May-2013 1-hour Data			BP, Moorefields Rd, Kingsgrove										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine			Vehicles										1-hour Data	1-hour Data		1-hour Data
			IN					OUT					Vehicles			Vehicles
TIME			Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total		LV	HV	
6:00	to	7:00	20	3	0	0	23	16	3	0	0	19	42	127	13	140
6:15	to	7:15	24	2	0	0	26	21	2	0	0	23	49	141	20	161
6:30	to	7:30	25	2	0	1	28	24	2	0	1	27	55	192	19	211
6:45	to	7:45	26	2	0	2	30	27	2	0	2	31	61	241	17	258
7:00	to	8:00	25	2	0	2	29	28	1	0	2	31	60	307	21	328
7:15	to	8:15	28	2	0	2	32	30	1	0	2	33	65	360	20	380
7:30	to	8:30	28	2	0	1	31	27	1	0	1	29	60	401	24	425
7:45	to	8:45	25	2	0	1	28	22	1	0	0	23	51	479	31	510
8:00	to	9:00	28	3	0	1	32	25	2	0	0	27	59	525	34	559
8:15	to	9:15	24	3	0	1	28	23	2	0	0	25	53	507	33	540
8:30	to	9:30	23	2	0	2	27	21	1	0	1	23	50	456	32	488
8:45	to	9:45	30	1	0	1	32	24	1	0	2	27	59	354	28	382
9:00	to	10:00	25	0	0	1	26	21	0	0	2	23	49	308	32	340
9:15	to	10:15	25	0	0	1	26	15	0	0	2	17	43	308	35	343
9:30	to	10:30	26	1	0	1	28	21	1	0	1	23	51	332	34	366
9:45	to	10:45	20	2	0	1	23	18	2	0	1	21	44	355	35	390
10:00	to	11:00	18	3	0	2	23	15	3	0	2	20	43	326	29	355
10:15	to	11:15	17	3	0	2	22	18	3	0	2	23	45	336	25	361
10:30	to	11:30	15	3	0	1	19	14	2	0	2	18	37	343	26	369
10:45	to	11:45	16	2	0	1	19	14	2	0	1	17	36	361	26	387
11:00	to	12:00	18	1	0	0	19	16	1	0	0	17	36	364	26	390
11:15	to	12:15	14	1	0	0	15	13	1	0	0	14	29	352	30	382
11:30	to	12:30	20	0	0	0	20	17	1	0	0	18	38	410	34	444
11:45	to	12:45	20	0	0	0	20	23	0	0	0	23	43	393	30	423
12:00	to	13:00	21	0	0	0	21	24	0	0	0	24	45	392	25	417
12:15	to	13:15	23	0	0	0	23	26	0	0	0	26	49	399	26	425
12:30	to	13:30	19	0	0	0	19	23	0	0	0	23	42	332	22	354
12:45	to	13:45	21	0	0	0	21	21	0	0	0	21	42	342	29	371
13:00	to	14:00	20	0	0	0	20	19	0	0	0	19	39	356	31	387
13:15	to	14:15	18	0	0	0	18	18	0	0	0	18	36	390	29	419
13:30	to	14:30	21	0	0	0	21	19	0	0	0	19	40	426	34	460
13:45	to	14:45	22	0	0	0	22	18	0	0	0	18	40	477	32	509
14:00	to	15:00	25	0	0	0	25	25	0	0	0	25	50	512	32	544
14:15	to	15:15	33	0	0	0	33	31	0	0	0	31	64	582	32	614
14:30	to	15:30	34	0	0	0	34	34	0	0	0	34	68	645	27	672
14:45	to	15:45	39	0	0	0	39	39	0	0	0	39	78	707	24	731
15:00	to	16:00	40	1	0	0	41	39	1	0	0	40	81	805	25	830
15:15	to	16:15	38	1	0	0	39	35	1	0	0	36	75	855	23	878
15:30	to	16:30	37	1	0	0	38	37	1	0	0	38	76	927	23	950
15:45	to	16:45	37	1	0	0	38	39	1	0	0	40	78	947	25	972
16:00	to	17:00	32	0	0	0	32	33	0	0	0	33	65	920	21	941
16:15	to	17:15	28	0	0	0	28	33	0	0	0	33	61	954	20	974
16:30	to	17:30	37	0	0	0	37	40	0	0	0	40	77	938	19	957
16:45	to	17:45	32	0	0	0	32	38	0	0	0	38	70	940	20	960
17:00	to	18:00	38	0	0	0	38	40	0	0	0	40	78	975	21	996
17:15	to	18:15	49	0	0	0	49	46	0	0	0	46	95	938	21	959
17:30	to	18:30	45	1	0	0	46	37	1	0	0	38	84	856	15	871
17:45	to	18:45	41	1	0	0	42	32	1	0	0	33	75	781	12	793
18:00	to	19:00	38	1	0	0	39	33	1	0	0	34	73	685	13	698

Table 3.64 Site 10 BP, Moorefields Rd, Kingsgrove - Peak hours.

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Site activity TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
	light	heavy	fast food			light	heavy	fast food						
AM														
7:15 to 8:15	28	2	0	2	32	30	1	0	2	33	65	360	20	380
PM														
17:15 to 18:15	49	0	0	0	49	46	0	0	0	46	95	938	21	959

Peak hour	Vehicles										Grandtotal	Main Road Data		Grandtotal - Main Road
Frontage Road TIME	IN					OUT					1-hour Data	1-hour Data		1-hour Data
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total	Vehicles	LV	HV	Vehicles
	light	heavy	fast food			light	heavy	fast food						
AM														
8:00 to 9:00	28	3	0	1	32	25	2	0	0	27	59	525	34	559
PM														
17:00 to 18:00	38	0	0	0	38	40	0	0	0	40	78	975	21	996

Table 3.65 Site 10 BP, Moorefields Rd, Kingsgrove - Hourly data – consecutive.

21-May-2013 1-hour Data	BP, Moorefields Rd, Kingsgrove										Grandtotal	Main Road Data		Grandtotal - Main Road
WEATHER Fine TIME	Vehicles										1-hour Data	1-hour Data		1-hour Data
	IN					OUT					Vehicles	LV	HV	Vehicles
	Customer vehicles			Service/Delivery	Total	Customer vehicles			Service/Delivery	Total				
	light	heavy	fast food			light	heavy	fast food						
6:00 to 7:00	20	3	0	0	23	16	3	0	0	19	42	127	13	140
7:00 to 8:00	25	2	0	2	29	28	1	0	2	31	60	307	21	328
8:00 to 9:00	28	3	0	1	32	25	2	0	0	27	59	525	34	559
9:00 to 10:00	25	0	0	1	26	21	0	0	2	23	49	308	32	340
10:00 to 11:00	18	3	0	2	23	15	3	0	2	20	43	326	29	355
11:00 to 12:00	18	1	0	0	19	16	1	0	0	17	36	364	26	390
12:00 to 13:00	21	0	0	0	21	24	0	0	0	24	45	392	25	417
13:00 to 14:00	20	0	0	0	20	19	0	0	0	19	39	356	31	387
14:00 to 15:00	25	0	0	0	25	25	0	0	0	25	50	512	32	544
15:00 to 16:00	40	1	0	0	41	39	1	0	0	40	81	805	25	830
16:00 to 17:00	32	0	0	0	32	33	0	0	0	33	65	920	21	941
17:00 to 18:00	38	0	0	0	38	40	0	0	0	40	78	975	21	996
18:00 to 19:00	38	1	0	0	39	33	1	0	0	34	73	685	13	698
Total	348	14		6	368	334	12		6	352	720	6602	323	6925

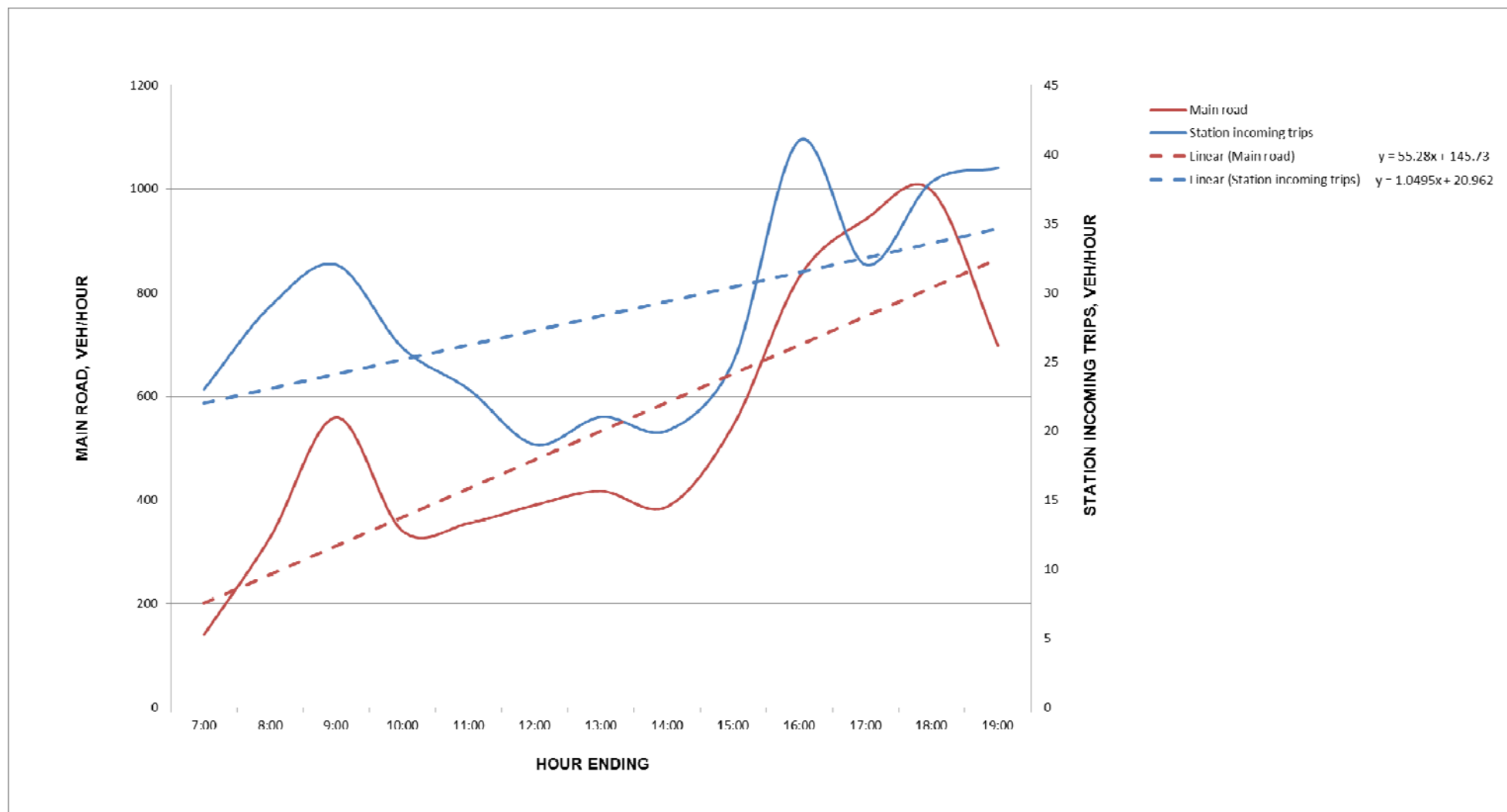


Figure 3.38 Site 10 BP, Moorefields Rd, Kingsgrove – Hourly trip distribution - vehicles.