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NSW Roads and Maritime Services

Report for High Density Residential Trip Generation Surveys

Data Report

September 2012

INFRASTRUCTURE | MINING & INDUSTRY | DEFENCE | PROPERTY & BUILDINGS | ENVIRONMENT

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- *Trip generation and Automatic Traffic Count Data has been supplied by Austraffic Pty Ltd*

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1. Introduction

GHD has been commissioned by NSW RMS to undertake surveys of high density residential developments to determine the trip generation associated with these developments. This information will be used to update the *RTA Guide to Traffic Generating Developments (2002)*, which is currently used as the guide to assessing the traffic generation and traffic impacts of new developments.

GHD has undertaken surveys of 10 high density developments around Sydney and NSW, to determine the traffic generation of these sites during the weekday and weekends. The following data is summarised in this report:

- Sites surveyed and their primary characteristics, including location, number of units, parking provision and characteristics of surrounding land use and transport infrastructure;
- Calculation of the “accessibility score” for each site;
- Weekday and weekend statistics for vehicle and person trip generation; and
- Automatic Traffic Counts (ATC) over one week for the primary road adjacent to each site.

Summaries of on-site interview and letterbox surveys are included in Appendix A and New Zealand Transport Database Site Survey Summary Sheets are included in Appendix B.

2. Survey Site Details

A total of ten high density residential developments were surveyed as part of this work. A list of the surveyed sites is shown below in Table 1.

Table 1 Summary of Survey Site Locations

Site ID	Site Address
1	13 Herbert Street, St Leonards
2	1 Cambridge Lane, Chatswood
3	8-12 Waratah Street, Cronulla
4	2-8 Ashton Street, Rockdale
5	26-30 Hassall Street, Parramatta
6	10 Wentworth Drive, Liberty Grove
7	2 Everton Road, Strathfield
8	316 Charlestown Road, Charlestown
9	3-5 Corrimal Street, Wollongong
10	208 Harris Street, Pyrmont

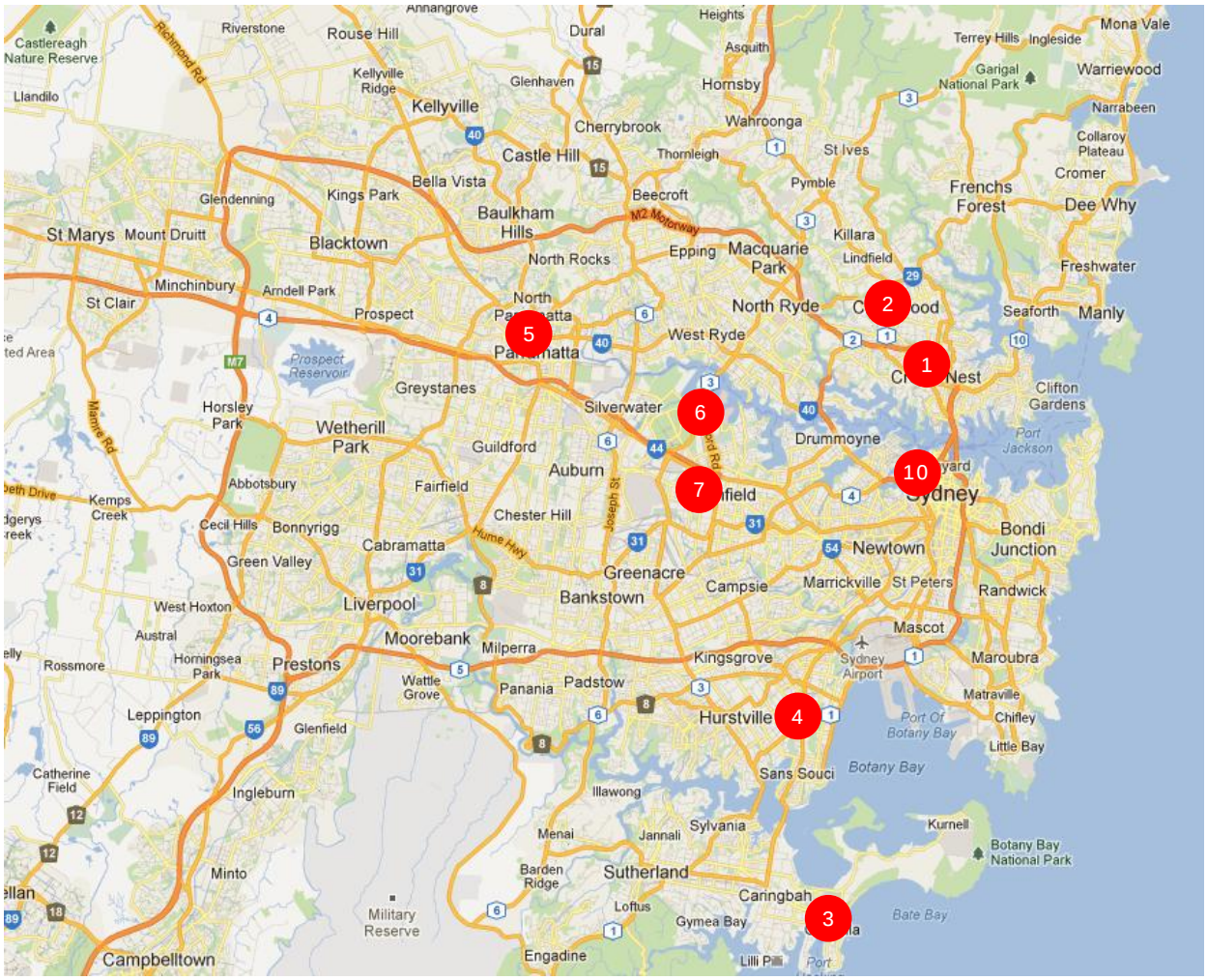
The details of each of these sites are documented in this Section, including the following:

- Site location;
- Site characteristics;
- Accessibility score;
- Qualitative observations from questionnaires and on-site interviews of residents and visitors.

2.1 Site Locations

The majority of the high density residential sites are located within the Sydney Greater Metropolitan Area (GMA). The locations for these Sydney sites are shown below in Figure 1.

Figure 1 - Sydney Survey Site Locations



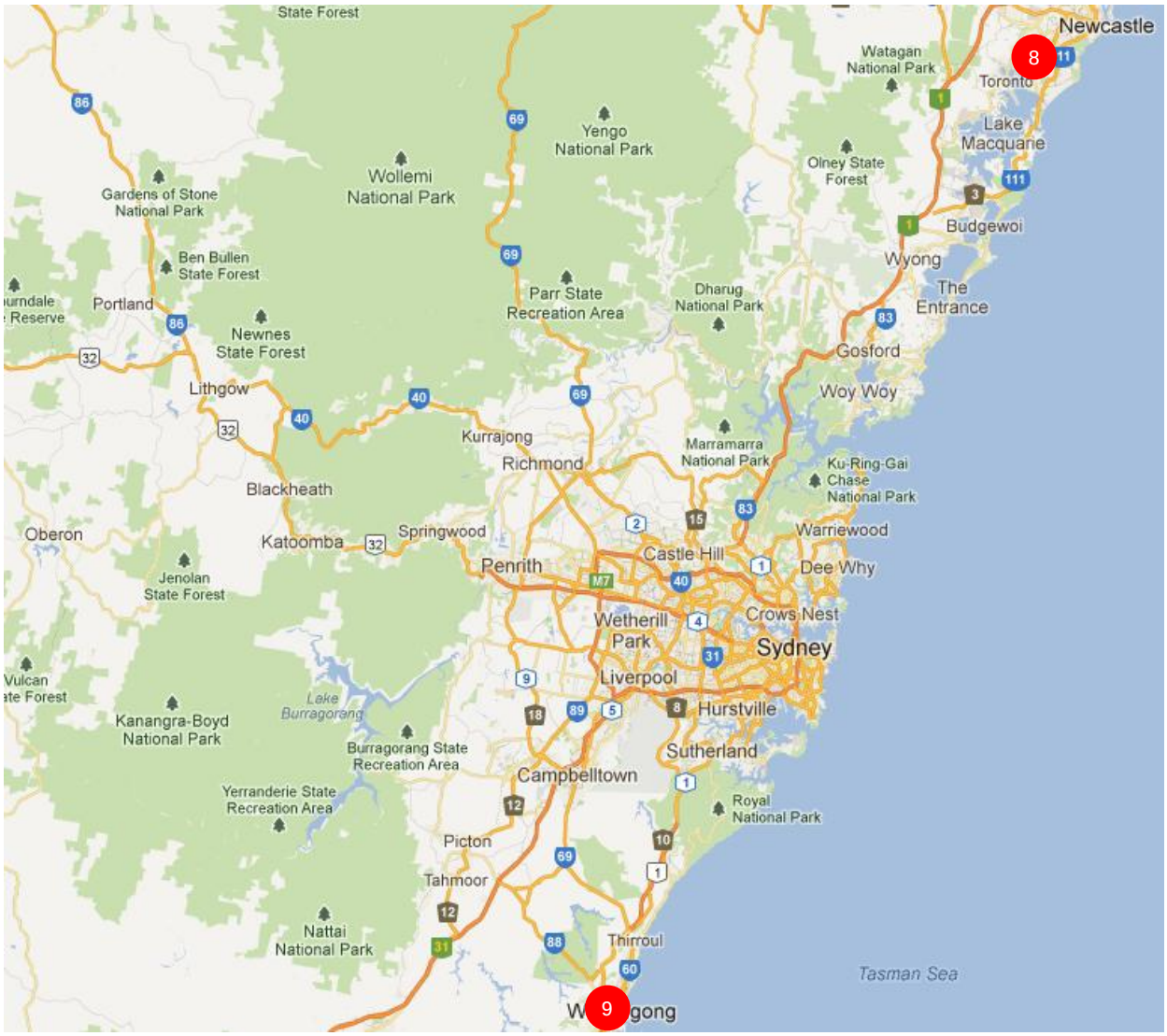
Source: Google Maps, 2012

A number of high density residential developments were sought outside of the Sydney GMA, however only 2 sites were approved for surveys. These sites were:

- 316 Charlestown Road, Charlestown; and
- 3-5 Corrimal Street, Wollongong.

Both Charlestown and Wollongong are regional cities, with Charlestown located approximately 150 km north of the Sydney CBD on the Central Coast and Wollongong located approximately 80 km south of the Sydney CBD. The locations of these regional sites are shown below in Figure 2.

Figure 2 - Regional Survey Site Locations



2.2 Survey Methodology

To determine the trip making behaviour associated with residential developments, it was necessary to survey people movements in and out of the development over the period of a day. This count survey seeks to identify the following factors associated with trip generation from the site:

- Quantum and profile of trip generation;
- Modes of transport used by trips;
- Trip purpose;
- Trip duration;
- Parking accumulation; and
- Traffic profile of nearby roads.

To capture this data, the count survey design consisted of five components:

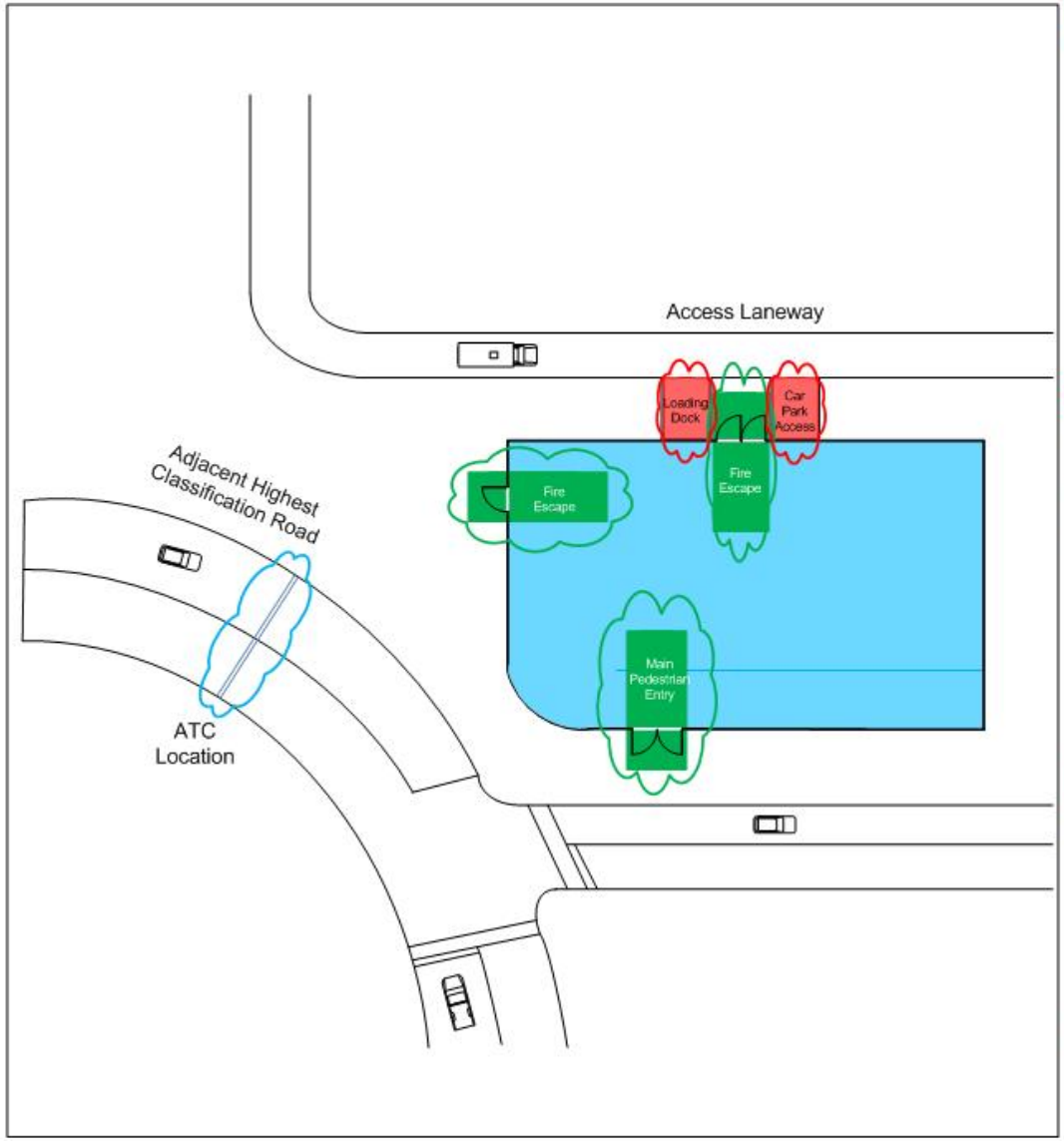
- Parking occupancy survey;
- Resident questionnaires (interview and letter box drop);
- Automatic Traffic Counts on up to two roads adjacent to the site;

- Vehicle counts at all vehicular accesses; and
- Pedestrian counts at all pedestrian accesses.

GHD commissioned Austraffic to undertake all of the above mentioned surveys.

A plan of a typical site with each of the survey elements specified above is shown in Figure 3.

Figure 3 – Trip Survey Design



General Site Data		
Survey Task	**Methodology**	**Typical Requirement**
Parking Inventory	An inventory of parking spaces by type (resident, visitor, business tenant, disabled, service, bicycle)	On-site survey of parking spaces prior to day of survey
Automatic Traffic Counts	An automatic traffic count covering both survey days (24 hours) on the highest-order adjacent road	Four-lane automatic traffic count
Mail-back forms	Trip making questionnaire to be dropped in mailboxes covering number and time of trips made, modes taken and trip purpose	Target response rate of 20%

Trip Making Information (vehicles)		
Survey Task	**Methodology**	**Typical Requirement**
Parking occupancy	Survey of parking space occupancy at the start of the survey period (6AM)	Parking occupancy survey undertaken at 5:00AM on day of survey
Access entry and exit counts	Video or staff survey over the day (6AM to 7PM) of all vehicles entering and exiting the development including vehicle occupancy, and numberplate	Typical site assumed to have one vehicle access only
Cyclist counts	Vehicle exit and entry to include cyclists (if cycle access is through carpark)	Typical site assumed to have cyclist access through vehicle and pedestrian accesses

Trip Making Information (pedestrians)		
Survey Task	**Methodology**	**Typical Requirement**
Access entry and exit counts	Video or staff survey over the day (6AM to 7PM) of all pedestrians exiting and entering the development via all accesses (including fire escapes) also including cyclists if using pedestrian accesses	Typical site assumed to have all pedestrian accesses visible from one location
Interview questionnaire	Trip making interviews to be conducted covering number and time of trips made, modes taken and trip purpose	On site interviews to be conducted for two 2-hour shifts on a weekday and one 2-hour shift on the weekend

Automatic traffic counts were undertaken on the highest-order road adjacent to the development. These counts were in place for the week of the survey period, covering both the weekday and weekend survey. Automatic traffic counts provide the general traffic profile on the network surrounding the development.

Automatic traffic counts were also undertaken across some driveways which sought to record an all day traffic profile of vehicles accessing the car parks. However, these automatic counts were unsuccessful due to slow driver speeds crossing the count tubes which prevented the counts from being registered.

A single-page travel survey was delivered to all resident letter boxes within the developments, with completed copies of the survey collected in a box at the foyer of the building on the week following the survey date. Interview surveys were also undertaken using the survey sheet. The survey sheet included questions regarding:

- The dwelling size (number of bedrooms);
- Number of residents in the dwelling;
- Number of cars and parking spaces;
- Trips made on the day of survey;
- Modes used on the day of survey;
- Travel time;
- Number of passengers (if car trip); and
- Purpose of trips.

On the day of the survey, an initial parking occupancy survey was undertaken to determine the initial parking demand for the parking accumulation survey. This was undertaken prior to the commencement of the vehicle and pedestrian surveys beginning.

A vehicle count was undertaken on the day of the survey to count all vehicle movements into and out of the resident car park accesses. This included a survey of vehicle movements, occupancy and numberplates, to allow for an estimate of the accumulation of parking demand and trip durations over the course of the day.

A similar count was undertaken at pedestrian accesses to determine the number of pedestrian trips made during the day, with interviews of pedestrians taken during key periods in the day to help determine the trip making behaviour of visitors as well as residents. The interview survey was undertaken using the single page letter box survey sheet.

Both pedestrian and vehicle access counts also include cyclists, who may enter and exit via both vehicle and pedestrian accesses depending on the layout of each development.

For each of the survey sites, spot checks were undertaken on survey data (pedestrian and vehicle counts) during peak hours to ensure that the data collected is of a high and consistent quality.

2.3 13 Herbert Street, St Leonards

This residential development is situated in St Leonards in the northern suburbs of Sydney, approximately 7 kilometres north of the Sydney central business district.

2.3.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 4.

Figure 4 St Leonards Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium-to-high density mixed-use developments and is adjacent to Royal North Shore Hospital.
- St Leonards railway station, which is located on the North Shore and Northern railway lines, is situated 100m from the site.
- Herbert Street, which is a collector road, provides vehicle and pedestrian access to the site.
- Adjacent on-street parking is available on Herbert Street, and is time restricted during weekdays and Saturdays.

A more detailed summary of the characteristics of this residential development is provided in Table 2.

Table 2 St Leonards Site Details

Site Identification	
Address	**13 Herbert Street, St Leonards**
Building Name	**Linea Tower**
Suburb	St Leonards
Region	Sydney
Year Constructed	1999
Site Details	
No. of Buildings	1
No. of Levels	13
No. of Units	70
No. of Parking Spaces	97
No. of 1 Bedroom Units	15
No. of 2 Bedroom Units	24
No. of 3+ Bedroom Units	31
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	Herbert Street, St Leonards
Surveyed Period	Thursday, 8 March 2012 - Wednesday, 14 March 2012
AM Peak - Weekdays	8:00 AM - 9:00 AM
PM Peak - Weekdays	5:00 PM - 6:00 PM
Peak - Weekends	11:00 AM – 12:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Thursday, 8 March 2012
Date of Survey - Weekends	Saturday, 10 March 2012

2.3.2 Accessibility Score

The St Leonards site is serviced by the following public transport amenities:

- Rail – St Leonards Railway Station.
- Bus – Routes m40, m20, 140, 143, 144, 200 and 257 operated by Sydney Buses.

The accessibility score of this residential development is provided in Table 3.

Table 3 Accessibility Score Determination for 13 Herbert Street, St Leonards

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	1	-	-	24
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	24
	Light rail or ferry route 0 – 400m		Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	-	-
	Each bus route 400 – 800m		Score = 1	1	-	-	7	7
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	7
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	24	-	-	24
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	2	4
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1		1	-	-	5	5
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	24	-	4	84
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	-	2	4
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	2	2
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	1	0.5
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	90.5
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		-		-
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		1		20
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								110.5
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Based on the calculations shown in Table 3, the accessibility score of the St Leonards site is 110.5, which corresponds to an accessibility discount factor of 0.4

2.3.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the St Leonards residential development. A total of 140 surveys were distributed over two days (weekday and Saturday) to the 70 dwellings in the building, with 38 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 103 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 1 per-dwelling.
- The typical vehicle ownership of survey respondents was 0 per-dwelling.
- The parking provision for respondents ranged between 0 and 2, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 3, with the most common being 1 bedroom per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was train.
- The typical number of non-resident visitors was 1 per-day per-dwelling, with the most common visitation mode being car (driver).
- The peak trip generating periods for respondents was 12 PM to 5 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was 0 to 5 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

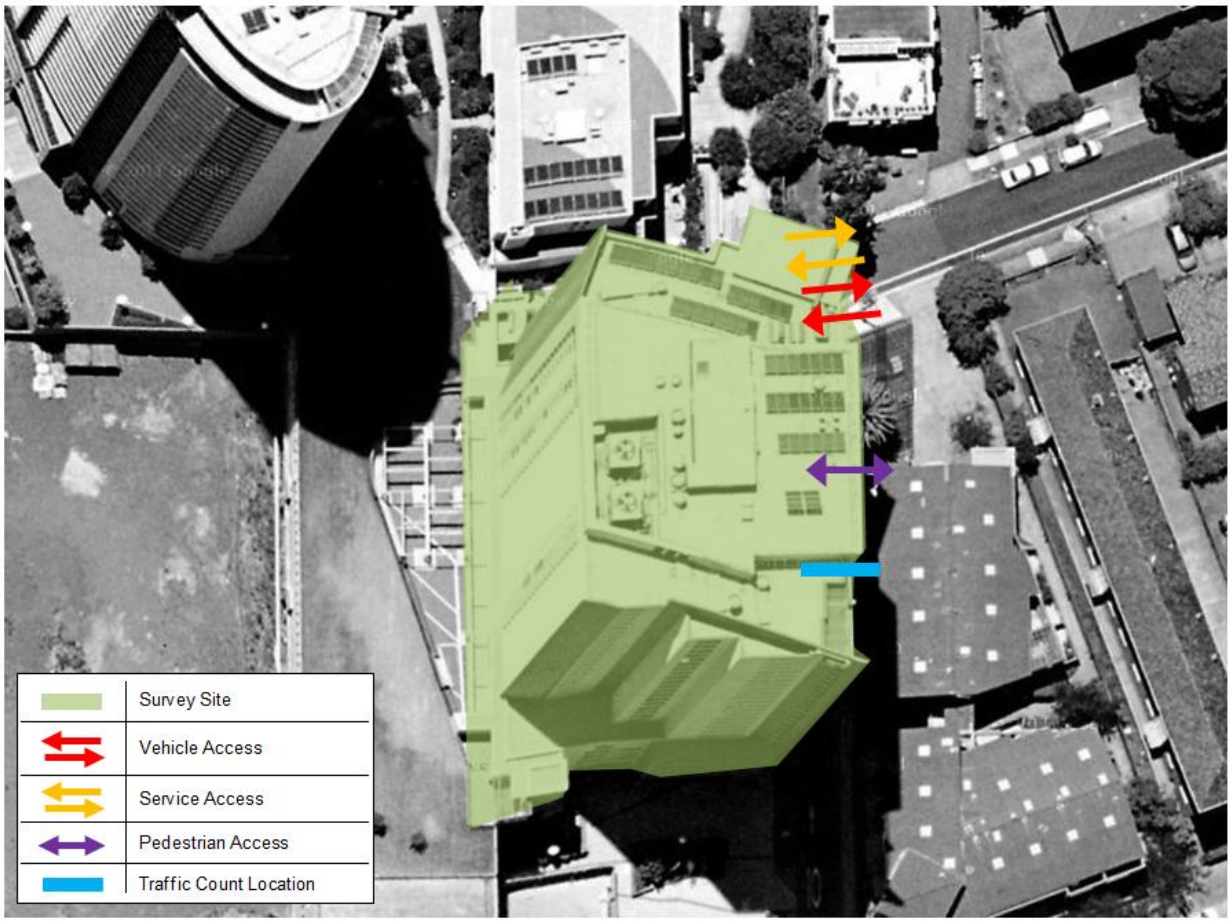
2.4 1 Cambridge Lane, Chatswood

This residential development is situated in Chatswood in the northern suburbs of Sydney, approximately 9 kilometres north of the Sydney central business district.

2.4.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 5.

Figure 5 Chatswood Site Layout



The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium-to-high density mixed-use developments.
- Chatswood transport interchange, which provides rail and bus amenities, is situated immediately south of the site.
- Cambridge Lane, which is a local road, provides vehicle and pedestrian access to the site.
- The Chatswood Westfield shopping complex and pedestrian mall are situated 200m south of the site.
- Adjacent on-street parking is available on Cambridge Lane, and is time restricted during weekdays.

A more detailed summary of the characteristics of this residential development is provided in Table 4.

Table 4 Chatswood Site Details

Site Identification	
Address	**1 Cambridge Lane, Chatswood**
Building Name	**Cambridge**
Suburb	Chatswood
Region	Sydney
Year Constructed	2002
Site Details	
No. of Buildings	1
No. of Levels	24
No. of Units	129
No. of Parking Spaces	206
No. of 1 Bedroom Units	8
No. of 2 Bedroom Units	96
No. of 3+ Bedroom Units	25
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	Retail on ground floor, childcare centre within building accessible via separate entrance (not surveyed)
Automatic Traffic Counter	
Location	1 Cambridge Lane, Chatswood
Surveyed Period	Saturday, 3 December 2011 - Friday, 9 December 2011
AM Peak - Weekdays	8:00 AM - 9:00 AM
PM Peak - Weekdays	5:00 PM - 6:00 PM
Peak - Weekends	12:00 PM – 1:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 6 December 2011
Date of Survey - Weekends	Saturday, 3 December 2011

2.4.2 Accessibility Score

The Chatswood site is serviced by the following public transport amenities:

- Rail – Chatswood Railway Station.
- Bus – Routes m40, 136, 137, 143, 144, 200, 257, 267, 273, and L60 operated by Sydney Buses.

The accessibility score for this residential development is provided in Table 5.

Table 5 Accessibility Score Determination for 1 Cambridge Lane, Chatswood

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	1	-	-	24
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	24
	Light rail or ferry route 0 – 400m		Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	10	40
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	40
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	24	-	-	24
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	28	56
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	12	18
	Standard bus route.	Multiply bus route score by 1		1	-	-	-	-
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	24	0	16	120
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	0	0	14	28
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	0	0	22	22
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	0	0	22	11
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	181
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								221
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								0.6

Based on the calculations shown in Table 5, the accessibility score of the Chatswood site is 221, which corresponds to an accessibility discount factor of 0.6.

2.4.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Chatswood residential development. A total of 258 surveys were distributed over two days (weekday and Saturday) to the 129 dwellings in the building, with 33 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 155 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 0 and 3, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 3, with the most common being 3 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was car (driver).
- The typical number of non-resident visitors was 1 per-day per-dwelling, with the most common visitation mode being train.
- The peak trip generating periods for respondents was 7 AM to 9 AM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was 0 to 5 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

2.5 8-12 Waratah Street, Cronulla

This residential development is situated in Cronulla in the southern suburbs of Sydney, approximately 22 kilometres from the Sydney central business district.

2.5.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 5.

Figure 6 Cronulla Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium density developments.
- Cronulla railway station, which provides rail and bus amenities, is situated 300m north-west of the site.
- The Cronulla Ferry wharf is situated 400 m north-west of the site.
- The Cronulla Plaza and pedestrian mall are situated 400 m north-west of the site.
- Waratah Street, which is a collector road, provides vehicle and pedestrian access to the site.
- Adjacent on-street parking is provided on Waratah Street and is unrestricted.

A more detailed summary of the characteristics of this residential development is provided in Table 6.

Table 6 Cronulla Site Details

Site Identification	
Address	**8-12 Waratah Street, Cronulla**
Building Name	**Matthew Flinders Tower**
Suburb	Cronulla
Region	Sydney
Year Constructed	1973
Site Details	
No. of Buildings	1
No. of Levels	16
No. of Units	28
No. of Parking Spaces	18
No. of 1 Bedroom Units	0
No. of 2 Bedroom Units	14
No. of 3+ Bedroom Units	14
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	Waratah Street, Cronulla
Surveyed Period	Saturday, 12 May 2012 - Friday, 18 May 2012
AM Peak - Weekdays	8:00 AM - 9:00 AM
PM Peak - Weekdays	5:00 PM - 6:00 PM
Peak - Weekends	12:00 PM – 1:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 15 May 2012
Date of Survey - Weekends	Saturday, 12 May 2012

2.5.2 Accessibility Score

The Cronulla site is serviced by the following public transport amenities:

- Rail – Cronulla Railway Station.
- Bus – Routes 962, 969, 971, and 987 operated by Veolia Buses.
- Ferry – Weekday ferry service running between Cronulla and Bundeena, which is operated by Cronulla and National Park Ferry Cruises.

The accessibility score for this residential development is provided in Table 7.

Table 7 Accessibility Score Determination for 8-12 Waratah Street, Cronulla

Step	Scoring Methodology		Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:						
	Rail station 0 – 400m	Score = 24	24	1	-	-	24
	Rail station 400 – 800m	Score = 12	12	-	-	-	-
	Rail station > 800m	Score = 0	0	-	-	-	-
	Light rail / ferry scores:					Total	24
	Light rail or ferry route 0 – 400m	Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m	Score = 4	4	-	1	-	4
	Light rail or ferry route >800m	Score = 0	0	-	-	-	-
	Bus scores:					Total	4
	Each bus route 0 – 400m	Score = 4	4	-	-	3	12
	Each bus route 400 – 800m	Score = 1	1	-	-	1	1
	Each bus route > 800m	Score = 0	0	-	-	-	-
						Total	13
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:						
	Heavy rail, light rail or ferry route	Multiply by 1	1	24	4	-	28
	Bus Transitway	Multiply bus route score by 3	3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2	2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5	1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1	1	-	-	13	13
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor						
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:						
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3	3	24	-	-	72
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2	2	-	-	-	-
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1	1	-	-	-	-
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5	0.5	-	4	13	8.5
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score						Total	80.5
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:						
	Within 800m of boundary of existing Global/Regional City	Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre	Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre	Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score							120.5
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)							

Based on the calculations shown in Table 7, the accessibility score of the Cronulla site is 120.5, which corresponds to an accessibility discount factor of 0.6

2.5.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Cronulla residential development. A total of 56 surveys were distributed over two days (weekday and Saturday) to the 28 dwellings in the building, with 17 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 49 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 1 and 2, with the most common being 2 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 2 and 3, with the most common being 2 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was walk.
- The typical number of non-resident visitors was 1 per-day per-dwelling, with the most common visitation mode being car (driver).
- The peak trip generating periods for respondents was 9 AM to 12 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was more than 11 to 15 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

2.6 2-8 Ashton Street, Rockdale

This residential development is situated in Rockdale, which is approximately 13 kilometres south of the Sydney central business district.

2.6.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 7.

Figure 7 Rockdale Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium-to-high density mixed-use and commercial developments.
- Rockdale Plaza, which is a medium sized shopping centre, is situated adjacent to the site.
- The Princes Highway is an arterial road running north-south adjacent to the site.
- Rockdale railway station and transport interchange is situated 300 m north of the site.
- Vehicular and pedestrian access to the site is provided from Ashton Street and Rockdale Plaza Drive, which are both local roads.
- Adjacent on-street parking is provided on Ashton Street and is unrestricted.

A more detailed summary of the characteristics of this residential development is provided in Table 8.

Table 8 Rockdale Site Details

Site Identification	
Address	**2-8 Ashton Street, Rockdale**
Building Name	**The Ashton**
Suburb	Rockdale
Region	Sydney
Year Constructed	1995 and 1996
Site Details	
No. of Buildings	2
No. of Levels	10 (Tower 1) and 11 (Tower 2)
No. of Units	234
No. of Parking Spaces	260
No. of 1 Bedroom Units	4
No. of 2 Bedroom Units	214
No. of 3+ Bedroom Units	16
No. of Pedestrian Accesses	2 (one for each tower)
No. of Vehicle Accesses	◗ 1 Entrance (residents) ◗ 2 Exits(residents) ◗ 1 Service vehicle access
Other Land Uses	◗ Commercial/retail on ground floor of Building 2. ◗ Building complex adjoins Rockdale Plaza.
Automatic Traffic Counter	
Location	1 Ashton Street, Rockdale
Surveyed Period	Wednesday, 22 February 2012 - Tuesday, 28 February 2012
AM Peak - Weekdays	8:00 AM - 9:00 AM
PM Peak - Weekdays	6:00 PM - 7:00 PM
Peak - Weekends	6:00 PM – 7:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Thursday, 23 February 2012
Date of Survey - Weekends	Saturday, 25 February 2012

2.6.2 Accessibility Score

The Rockdale site is serviced by the following public transport amenities:

- Rail – Rockdale Railway Station.

- Bus – Routes 410, 422, 473, 476, 477, 478, 479, 492, and 493, operated by Sydney Buses.

The accessibility score for this residential development is provided in Table 9.

Table 9 Accessibility Score Determination for 2-8 Ashton Street, Rockdale

Step	Scoring Methodology		Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:						
	Rail station 0 – 400m	Score = 24	24	-	-	-	-
	Rail station 400 – 800m	Score = 12	12	1	-	-	12
	Rail station > 800m	Score = 0	0	-	-	-	-
	Light rail / ferry scores:					Total	12
	Light rail or ferry route 0 – 400m	Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m	Score = 4	4	-	-	-	-
	Light rail or ferry route >800m	Score = 0	0	-	-	-	-
	Bus scores:					Total	0
	Each bus route 0 – 400m	Score = 4	4	-	-	5	20
	Each bus route 400 – 800m	Score = 1	1	-	-	4	4
	Each bus route > 800m	Score = 0	0	-	-	-	-
						Total	24
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:						
	Heavy rail, light rail or ferry route	Multiply by 1	1	12	-	-	12
	Bus Transitway	Multiply bus route score by 3	3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2	2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5	1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1	1	-	-	24	24
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor						
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:						
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3	3	12	-	4	48
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2	2	-	-	5	10
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1	1	-	-	13	13
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5	0.5	-	-	2	1
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score						Total	72
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:						
	Within 800m of boundary of existing Global/Regional City	Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre	Score =40	40		-		-
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre	Score =20	20		1		20
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score							92
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)							

Based on the calculations shown in Table 9, the accessibility score of the Rockdale site is 92, which corresponds to an accessibility discount factor of 0.6

2.6.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Rockdale residential development. A total of 468 surveys were distributed over two days (weekday and Saturday) to the 234 dwellings in the building, with 43 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 211 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 4 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 1 and 3, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 2 and 3, with the most common being 2 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was train.
- The typical number of non-resident visitors was 2 per-day per-dwelling, with the most common visitation mode being train.
- The peak trip generating periods for respondents was 9 AM to 12 PM
- The typical duration of the walk component of public transport related trips made by respondents was 11 to 15 minutes.
- The typical duration of walk-only trips made by respondents was more than 30 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

2.7 26-30 Hassall Street, Parramatta

This residential development is situated in Parramatta, which is approximately 23 kilometres west from the Sydney central business district.

2.7.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 8.

Figure 8 Parramatta Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium-to-high density mixed-use developments.
- Parramatta railway station and transport interchange is situated 300 m west of the site.
- Vehicular and pedestrian access to the site is provided from Hassall Street, which is a local road.
- Parramatta Ferry Wharf is located 400 m north of the site on the Parramatta River.
- Parramatta Westfield shopping centre is situated 600 m west of the site.
- Macquarie Street Carpark is located adjacent to the site, and offers restricted parking between 6 AM and 7 PM, Monday through Saturday.

A more detailed summary of the characteristics of this residential development is provided in Table 10.

Table 10 Parramatta Site Details

Site Identification	
Address	**26-30 Hassall Street, Parramatta**
Building Name	**26-30 Hassall Street, Parramatta**
Suburb	Parramatta
Region	Sydney
Year Constructed	2002
Site Details	
No. of Buildings	1
No. of Levels	15
No. of Units	83
No. of Parking Spaces	108
No. of 1 Bedroom Units	9
No. of 2 Bedroom Units	57
No. of 3+ Bedroom Units	17
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	26-30 Hassall Street, Parramatta
Surveyed Period	Saturday 31 March 2012, Tuesday 3 April 2012, 29 April 2012 – Saturday, 5 May 2012
AM Peak - Weekdays	8:00 AM – 9:00 AM
PM Peak - Weekdays	5:00 PM – 6:00 PM
Peak - Weekends	1:00 PM – 2:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 3 April 2012
Date of Survey - Weekends	Saturday, 31 March 2012

2.7.2 Accessibility Score

The Parramatta site is serviced by the following public transport amenities:

- Rail – Parramatta Railway Station.
- Bus – Routes 520, 521, 523, 524, 525, 545, 546, 547, 549, 550, 552 m52, and m54 operated by Sydney Buses.

- Ferry – Ferry service running between Parramatta and Circular Quay that is operated by Sydney ferries.

The accessibility score for this residential development is provided in Table 11.

Table 11 Accessibility Score Determination for 26-30 Hassall Street, Parramatta

Step	Scoring Methodology			Parameter	Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	1	-	-	24
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	24
	Light rail or ferry route 0 – 400m		Score = 8	8	-	1	-	8
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	8
	Each bus route 0 – 400m		Score = 4	4	-	-	13	52
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	52
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route		Multiply by 1	1	32	-	-	32
	Bus Transitway		Multiply bus route score by 3	3	-	-	-	-
	Other Strategic Bus Corridor*		Multiply bus route score by 2	2	-	-	44	88
	Corridor with express services		Multiply bus route score by 1.5	1.5	-	-	-	-
	Standard bus route.		Multiply bus route score by 1	1	-	-	-	-
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							120
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways		Multiply mode score by 3	3	24	-	24	144
	13-20 services in the 2hr AM peak both ways		Multiply mode score by 2	2	-	-	-	-
	8-12 services in the 2hr AM peak both ways		Multiply mode score by 1	1	-	8	32	40
	≤ 7 services in the 2hr AM peak both ways		Multiply mode score by 0.5	0.5	-	-	48	24
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	208
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								248
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Based on the calculations shown in Table 11, the accessibility score of the Parramatta site is 248, which corresponds to an accessibility discount factor of 0.6

2.7.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Parramatta residential development. A total of 166 surveys were distributed over two days (weekday and Saturday) to the 83 dwellings in the building, with 30 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 116 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 0 and 2, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 3, with the most common being 2 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was walk.
- There were no responses recorded relating to non-resident visitation at this site.
- The peak trip generating periods for respondents was 12 PM to 5 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was more than 30 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

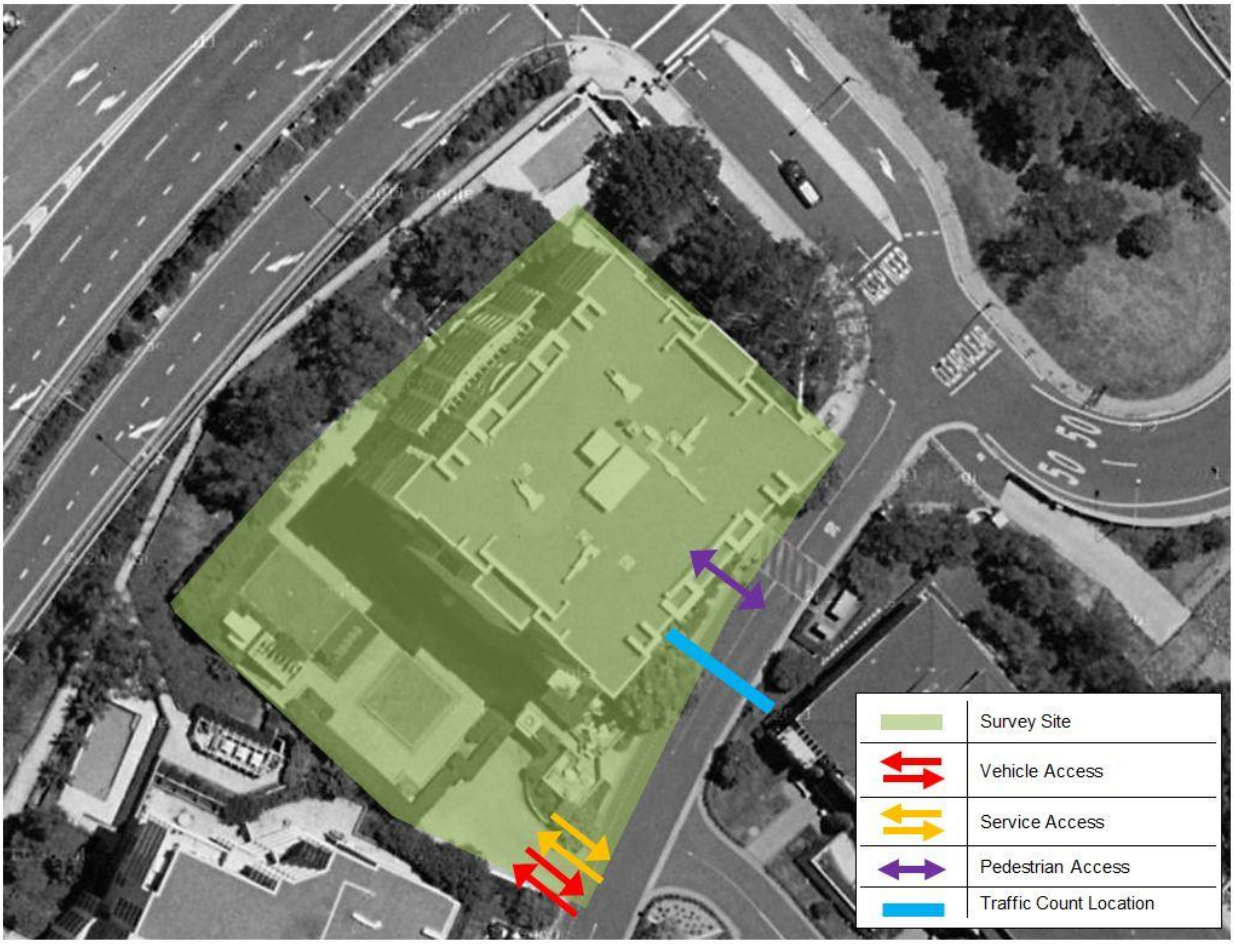
2.8 10 Wentworth Drive, Liberty Grove

This residential development is situated in Liberty Grove in the inner-west of Sydney, approximately 16 kilometres from the Sydney central business district.

2.8.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 9.

Figure 9 Liberty Grove Site Layout



The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by high density residential developments.
- Rhodes railway station on the Northern line is situated 900m north of the site.
- Vehicular and pedestrian access to the site is provided from Wentworth Drive, which is a local road that connects to Homebush Bay Drive, an arterial road.
- Rhodes Shopping Centre is situated 150m north of the site.
- Off-street parking adjacent to the kerb is available on Wentworth Drive, and Bradley Place.

A more detailed summary of the characteristics of this residential development is provided in Table 12.

Table 12 Liberty Grove Site Details

Site Identification	
Address	**10 Wentworth Drive, Liberty Grove**
Building Name	**Rosebank**
Suburb	Liberty Grove
Region	Sydney
Year Constructed	1998
Site Details	
No. of Buildings	1
No. of Levels	10
No. of Units	64
No. of Parking Spaces	93
No. of 1 Bedroom Units	0
No. of 2 Bedroom Units	36
No. of 3+ Bedroom Units	28
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	10 Wentworth Drive, Liberty Grove
Surveyed Period	Sunday, 13 May 2012 – Saturday, 19 May 2012
AM Peak - Weekdays	8:00 AM – 9:00 AM
PM Peak - Weekdays	5:00 PM – 6:00 PM
Peak - Weekends	5:00 PM – 6:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Thursday, 17 May 2012
Date of Survey - Weekends	Saturday, 19 May 2012

2.8.2 Accessibility Score

The Liberty Grove site is serviced by the following public transport amenities:

- Bus – Routes 458, 459, 460, and m41 operated by Sydney Buses.

The accessibility score for this residential development is provided in Table 13.

Table 13 Accessibility Score Determination for 10 Wentworth Drive, Liberty Grove

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	-	-	-	-
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	0
	Light rail or ferry route 0 – 400m		Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	4	16
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	16
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	-	-	-	-
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	4	8
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1		1	-	-	12	12
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							20
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	-	-	8	24
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	-	-	-
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	4	4
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	8	4
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	32
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								72
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Based on the calculations shown in Table 13, the accessibility score of the Liberty Grove site is 72, which corresponds to an accessibility discount factor of 0.4

2.8.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Liberty Grove residential development. A total of 128 surveys were distributed over two days (weekday and Saturday) to the 64 dwellings in the building, with 33 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 96 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 4 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 0 and 2, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 4, with the most common being 2 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was car (driver).
- The typical number of non-resident visitors was 1 per-day per-dwelling, with the most common visitation mode being car (driver).
- The peak trip generating periods for respondents were 7 AM to 9 AM, and 9 AM to 12 PM
- The typical duration of the walk component of public transport related trips made by respondents was 11 to 15 minutes.
- The typical duration of walk-only trips made by respondents was more than 30 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

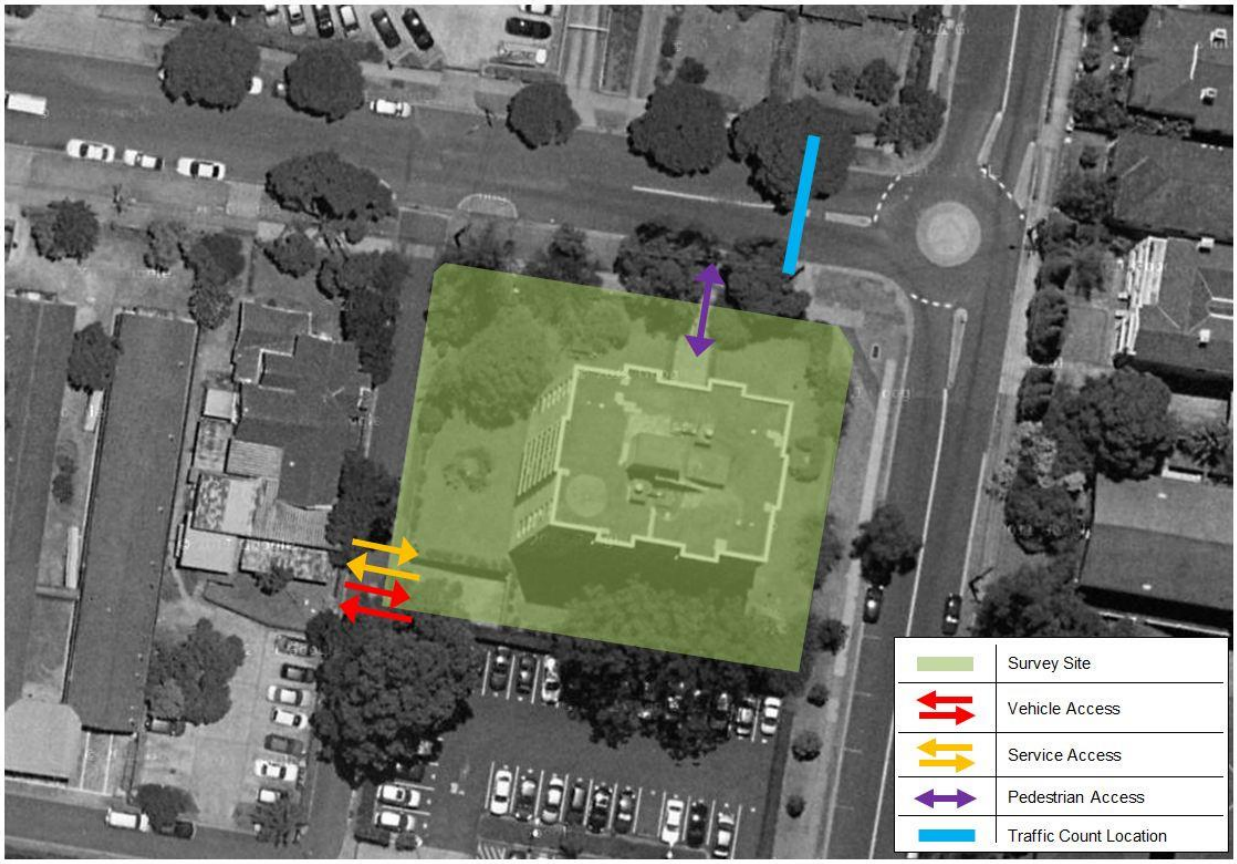
2.9 2 Everton Road, Strathfield

This residential development is situated in Strathfield, which is approximately 14 kilometres west of the Sydney central business district.

2.9.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 10.

Figure 10 Strathfield Site Layout



The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by low-to-medium density residential developments.
- Strathfield railway station on the Northern, Inner West, Western and Southern lines is situated 250m west of the site.
- Vehicular and pedestrian access to the site is provided from Everton Road (local road) and Wentworth Road (collector road).
- Strathfield Plaza is situated 500m south-west of the site.
- On-street parking is available on Everton Road immediately west of the site location and is unrestricted. In addition, on-street parking is available on Wentworth Road, which is restricted between 8 AM and 6 PM during weekdays, and between 8 AM and 1 PM on Saturdays.

A more detailed summary of the characteristics of this residential development is provided in Table 14.

Table 14 Strathfield Site Details

Site Identification	
Address	**2 Everton Road, Strathfield**
Building Name	**n/a**
Suburb	Strathfield
Region	Sydney
Year Constructed	c. 1970
Site Details	
No. of Buildings	1
No. of Levels	8
No. of Units	31
No. of Parking Spaces	30
No. of 1 Bedroom Units	0
No. of 2 Bedroom Units	31
No. of 3+ Bedroom Units	0
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	1 Everton Road, Strathfield
Surveyed Period	Wednesday, 14 March 2012 – Tuesday, 20 March 2012
AM Peak - Weekdays	8:00 AM – 9:00 AM
PM Peak - Weekdays	4:00 PM – 5:00 PM
Peak - Weekends	3:00 PM – 4:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Thursday, 15 March 2012
Date of Survey - Weekends	Saturday, 17 March 2012

2.9.2 Accessibility Score

The Strathfield site is serviced by the following public transport amenities:

- Rail – Strathfield railway station.
- Bus – Routes 407, 408, 415, 462, 466, 525, and 526 operated by Sydney BNewcastuses.

The accessibility score for this residential development is provided in Table 15.

Table 15 Accessibility Score Determination for the 2 Everton Road, Strathfield

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	1	-	-	24
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	24
	Light rail or ferry route 0 – 400m		Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	6	24
	Each bus route 400 – 800m		Score = 1	1	-	-	1	1
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	25
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	24	-	-	24
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1		1	-	-	25	25
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							49
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	24	-	-	72
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	-	4	8
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	12	12
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	9	4.5
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	96.5
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								136.5
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Based on the calculations shown in Table 15, the accessibility score of the Strathfield site is 96.5, which corresponds to an accessibility discount factor of 0.6

2.9.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Strathfield residential development. A total of 62 surveys were distributed over two days (weekday and Saturday) to the 31 dwellings in the building, with 29 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 54 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The typical parking provision for respondents was 1 parking space per-dwelling.
- The typical number of bedrooms per-dwelling for respondents was 2 per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 14.
- The most common mode of transport for respondents was train.
- There were no responses recorded relating to non-resident visitation at this site.
- The peak trip generating periods for respondents was 12 PM to 5 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was more than 30 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

2.10 316 Charlestown Road, Charlestown

This regional residential development is situated in Charlestown, which is approximately 10 kilometres south-west of the Newcastle central business district.

2.10.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 11.

Figure 11 Charlestown Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by commercial and retail developments, as well as low density residential developments.
- Charlestown transport interchange is situated 250m south-east of the site.
- Vehicular access to the site is provided from Chapman Street (Collector Road), and pedestrian access is provided from Charlestown Road (Sub-arterial Road).
- The Charlestown Square shopping complex is situated 100m south of the site.
- Limited on-street parking is available on Chapman Street, and is time restricted during weekdays.

A more detailed summary of the characteristics of this residential development is provided in Table 16.

Table 16 Charlestown Site Details

Site Identification	
Address	**316 Charlestown Road, Charlestown**
Building Name	**Alto**
Suburb	Charlestown
Region	Newcastle
Year Constructed	2004
Site Details	
No. of Buildings	1
No. of Levels	9
No. of Units	108
No. of Parking Spaces	113
No. of 1 Bedroom Units	31
No. of 2 Bedroom Units	53
No. of 3+ Bedroom Units	24
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	2 (1 residential vehicle access, 1 service vehicle access)
Other Land Uses	Commercial and Retail located on ground floor.
Automatic Traffic Counter	
Location	5 Chapman Street, Charlestown
Surveyed Period	Saturday, 12 May 2012 – Friday, 18 May 2012
AM Peak - Weekdays	11:00 AM – 12:00 PM
PM Peak - Weekdays	3:00 PM – 4:00 PM
Peak - Weekends	11:00 AM – 12:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 15 May 2012
Date of Survey - Weekends	Saturday, 12 May 2012

2.10.2 Accessibility Score

The Charlestown site is serviced by the following public transport amenities:

- Bus – Routes 100, 111, 310, 313, 317, 320, 322, 349 and 350 operated by Newcastle Buses.

The accessibility score for this residential development is provided in Table 17.

Table 17 Accessibility Score Determination for the 316 Charlestown Road, Charlestown

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	-	-	-	-
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	0
	Light rail or ferry route 0 – 400m		Score = 8	8	-	0	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	0	-	-
	Light rail or ferry route >800m		Score = 0	0	-	0	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	9	36
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	36
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	-	-	-	-
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1		1	-	-	36	36
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	-	-	-	-
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	-	-	-
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	12	12
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	24	12
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	24
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		-		-
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		1		40
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								64
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Therefore, the accessibility score of the Charlestown site is 64, which corresponds to the accessibility discount factor of 0.6.

2.10.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Charlestown residential development. A total of 216 surveys were distributed over two days (weekday and Saturday) to the 108 dwellings in the building, with 39 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 138 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 1 per-dwelling.
- The parking provision for respondents ranged between 1 and 2, with the most common being 2 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 3, with the most common being 2 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was car (driver).
- The typical number of non-resident visitors was 2 per-day per-dwelling, with the most common visitation mode being car (driver).
- The peak trip generating periods for respondents was 9 AM to 12 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was 6 to 10 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

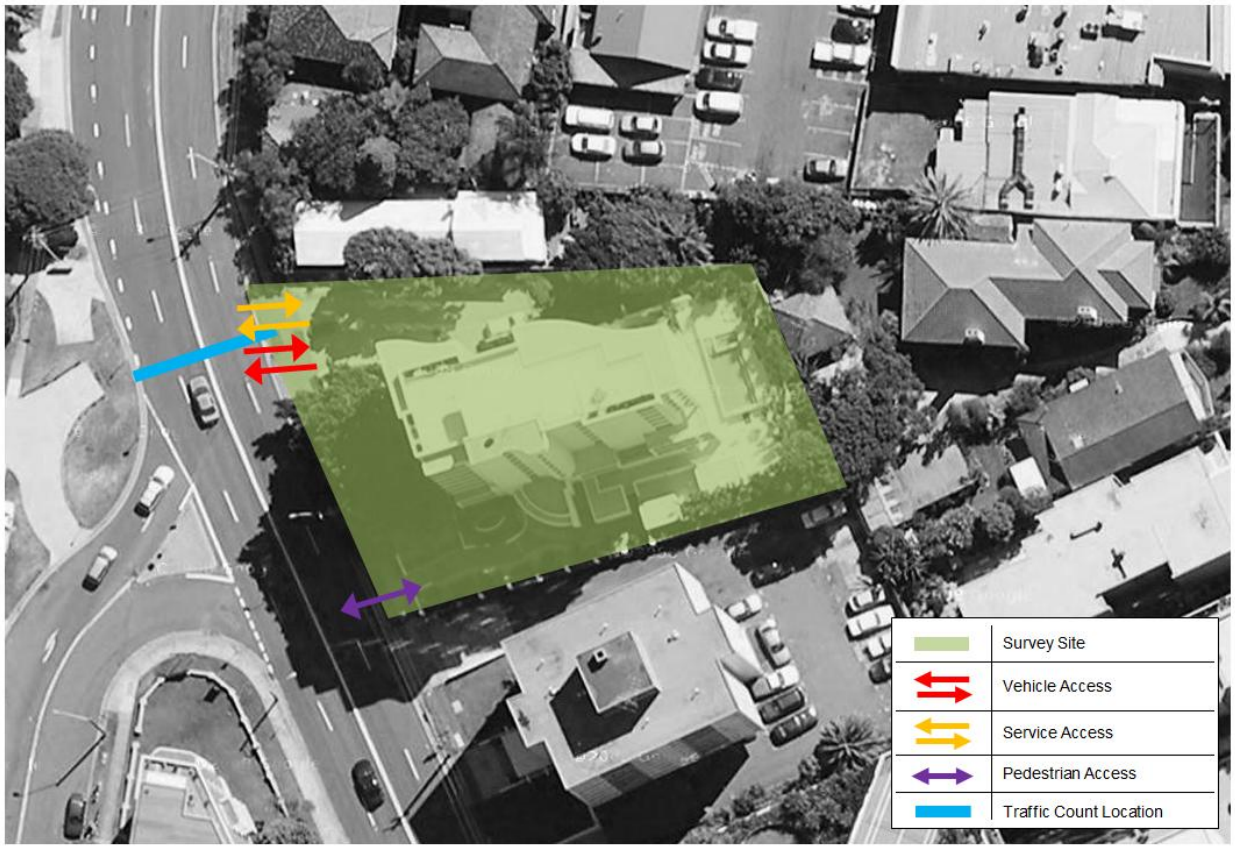
2.11 3-5 Corrimal Street, Wollongong

This regional residential development is situated in Wollongong in the Illawarra region of New South Wales, which is approximately 82 kilometres south of the Sydney central business district.

2.11.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 12.

Figure 12 Wollongong Site Layout



The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by medium-to-high density residential developments.
- Wollongong transport interchange, which provides rail and bus amenities, is situated 1.5 km south-west of the site.
- Corrimal Street, which is a collector road, provides vehicle and pedestrian access to the site.
- The Gateway Shopping Complex and Crown Street pedestrian mall are situated 1 km south of the site.

A more detailed summary of the characteristics of this residential development is provided in Table 18.

Table 18 Wollongong Site Details

Site Identification	
Address	3-5 Corrimal Street, Wollongong

Site Identification	
Building Name	**Quay**
Suburb	Wollongong
Region	Wollongong
Year Constructed	2004
Site Details	
No. of Buildings	1
No. of Levels	9
No. of Units	9
No. of Parking Spaces	19
No. of 1 Bedroom Units	0
No. of 2 Bedroom Units	0
No. of 3+ Bedroom Units	9
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	1
Other Land Uses	n/a
Automatic Traffic Counter	
Location	3-5 Corrimal Street, Wollongong
Surveyed Period	Monday, 28 May 2012 – Sunday, 3 June 2012
AM Peak - Weekdays	8:00 AM – 9:00 AM
PM Peak - Weekdays	5:00 PM – 6:00 PM
Peak - Weekends	12:00 PM – 1:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 29 May 2012
Date of Survey - Weekends	Saturday, 26 May 2012

2.11.2 Accessibility Score

The Liberty Grove site is serviced by the following public transport amenities:

- Bus – Routes 1 and 4 operated by Dion's Bus Services, route 2 operated by Greens Northern Coaches, and routes 3, 4, 6, 7, and 8 operated by Illawarra Premier.

The accessibility score for this residential development is provided in Table 19.

Table 19 Accessibility Score Determination for 3-5 Corrimal Street, Wollongong

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	-	-	-	-
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	1	-	-	0
	Light rail / ferry scores:						Total	0
	Light rail or ferry route 0 – 400m		Score = 8	8	-	-	-	-
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	0
	Each bus route 0 – 400m		Score = 4	4	-	-	-	-
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	7	7
							Total	7
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	-	-	-	-
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	-	-
	Standard bus route.	Multiply bus route score by 1		1	-	-	7	7
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	-	-	-	-
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	-	-	-
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	-	-
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	7	3.5
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	3.5
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		1		60
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		-		-
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								63.5
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Based on the calculations shown in Table 19, the accessibility score of the Wollongong site is 63.5, which corresponds to an accessibility discount factor of 0.4

2.11.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Wollongong residential development. A total of 18 surveys were distributed over two days (weekday and Saturday) to the 9 dwellings in the building, with 7 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 17 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The typical vehicle ownership of survey respondents was 2 per-dwelling.
- The most common parking provision for respondents was 2 per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 3 and 4, with the most common being 3 bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was car (driver).
- The typical visitation mode for non-resident visitors was car (driver).
- The peak trip generating periods for respondents was 12 PM to 5 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was 6 to 10 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

2.12 208 Harris Street, Pyrmont

This residential development is situated in Pyrmont, which is approximately 1 kilometre south-west of the Sydney central business district.

2.12.1 Site Characteristics

The site arrangement, as well as the location of the Automatic Traffic Counter is shown in Figure 13.

Figure 13 Pyrmont Site Layout

The characteristics of the surrounding land use include the following:

- The site is surrounded predominantly by low-to-medium density residential and mixed-use developments and is in close proximity to the Western Distributor , The Star Casino, and Sydney Darling Harbour.
- A number of stops for the Sydney Light Rail Network are situated within walking distance of the site.
- Vehicular access to the site is provided from Ada Place (Local Road), and pedestrian access is provided from Harris Street (Collector Road).
- Adjacent on-street paid parking is available on Pyrmont Street and Ada Place, and is time restricted.

A more detailed summary of the characteristics of this residential development is provided in Table 20.

Table 20 Pyrmont Site Details

Site Identification	
Address	209 Harris Street, Pyrmont
Building Name	**The Bauhaus Apartments**
Suburb	Pyrmont
Region	Sydney
Year Constructed	2001
Site Details	
No. of Buildings	1
No. of Levels	8
No. of Units	131
No. of Parking Spaces	199
No. of 1 Bedroom Units	70
No. of 2 Bedroom Units	54
No. of 3+ Bedroom Units	7
No. of Pedestrian Accesses	1
No. of Vehicle Accesses	2 (1 residential vehicle access, 1 service vehicle access)
Other Land Uses	Commercial and Retail on ground floor.
Automatic Traffic Counter	
Location	209 Harris Street Pyrmont
Surveyed Period	Tuesday, 17 July 2012 – Monday, 23 July 2012
AM Peak - Weekdays	9:00 AM – 10:00 AM
PM Peak - Weekdays	5:00 PM – 6:00 PM
Peak - Weekends	12:00 PM – 1:00 PM
Vehicle and Pedestrian Surveys	
Date of Survey - Weekdays	Tuesday, 26 June 2012
Date of Survey - Weekends	Saturday, 23 June 2012

2.12.2 Accessibility Score

The Pyrmont site is serviced by the following public transport amenities:

- Light Rail - Fish Market, Star City, and Pyrmont Bay light rail stations
- Bus – Routes 448, and 443 operated by Sydney Buses

The accessibility score of this residential development is provided in Table 21.

Table 21 Accessibility Score Determination for 208 Harris Street, Pyrmont

Step	Scoring Methodology			Parameter	No. of Facilities: Rail	No. of Facilities: Light Rail or Ferry	No. of Facilities: Bus	Scores
1. Determine walking distance from site to nearest dominant stop/station for each mode corridor or bus route.(Each route is counted once only)	Rail scores:							
	Rail station 0 – 400m		Score = 24	24	-	-	-	-
	Rail station 400 – 800m		Score = 12	12	-	-	-	-
	Rail station > 800m		Score = 0	0	-	-	-	-
	Light rail / ferry scores:						Total	0
	Light rail or ferry route 0 – 400m		Score = 8	8	-	1	-	8
	Light rail or ferry route 400 – 800m		Score = 4	4	-	-	-	-
	Light rail or ferry route >800m		Score = 0	0	-	-	-	-
	Bus scores:						Total	8
	Each bus route 0 – 400m		Score = 4	4	2	-	-	8
	Each bus route 400 – 800m		Score = 1	1	-	-	-	-
	Each bus route > 800m		Score = 0	0	-	-	-	-
							Total	8
2. Determine infrastructure priority treatment (This is a proxy for public transport reliability, connectivity and speed)	For each mode corridor, multiply the score in Step 1. above with the factor below:							
	Heavy rail, light rail or ferry route	Multiply by 1		1	-	8	-	8
	Bus Transitway	Multiply bus route score by 3		3	-	-	-	-
	Other Strategic Bus Corridor*	Multiply bus route score by 2		2	-	-	-	-
	Corridor with express services	Multiply bus route score by 1.5		1.5	-	-	4	6
	Standard bus route.	Multiply bus route score by 1		1	-	-	4	4
	* If bus route is on a Strategic Bus Corridor for less than 50% of its length, treat as an express corridor							8
3. Determine frequency	For each mode corridor, multiply the score in Step 2. above with the factor below:							
	> 20 services in the 2hr AM peak both ways	Multiply mode score by 3		3	-	-	4	12
	13-20 services in the 2hr AM peak both ways	Multiply mode score by 2		2	-	8	-	16
	8-12 services in the 2hr AM peak both ways	Multiply mode score by 1		1	-	-	-	-
	≤ 7 services in the 2hr AM peak both ways	Multiply mode score by 0.5		0.5	-	-	6	3
4. Add up all the scores for each mode corridor, to produce a total Public Transport Score							Total	31
5. Determine walking proximity of site to a centre (as defined in the Metropolitan Strategy)	Determine the Centre Score, using the following scores:							
	Within 800m of boundary of existing Global/Regional City		Score =60	60		1		60
	Within 800m of boundary of existing/developing Major Centre		Score =40	40		-		-
	Within 800m of boundary of existing/developing Smaller Centre and Specialised Centre		Score =20	20		-		-
6. Add the Public Transport Score from Step 4. above to Centre Score from Step 5. above, to produce a total Accessibility Score								91
7. Use Table 2 below to convert the Accessibility Score to the Accessibility Discount factor (AD)								

Therefore, the accessibility score of the Pyrmont site is 91, which corresponds to the accessibility discount factor of 0.9.

2.12.3 Summary of Resident Questionnaire Response

A trip generation questionnaire was distributed to the residents of the Wollongong residential development. A total of 262 surveys were distributed over two days (weekday and Saturday) to the 131 dwellings in the building, with 48 survey responses received (including interviews) for the entire surveyed period. In order to achieve a representative sample of residents (survey confidence level of 95% with a margin of error of 5%), 156 responses would need to have been collected as part of the survey. Although a representative sample has not been achieved, the following general trends in the survey questionnaires were observed:

- The typical dwelling occupancy of survey respondents was 2 per-dwelling.
- The parking provision for respondents ranged between 0 and 2, with the most common being 1 parking space per-dwelling.
- The number of bedrooms per-dwelling for respondents ranged between 1 and 3, with the most common being 1bedrooms per-dwelling.
- The typical number of trips (two-way) per-day per-unit for respondents was 1.
- The most common mode of transport for respondents was walk.
- The typical visitation mode for non-resident visitors was car (driver).
- The peak trip generating periods for respondents was 12 PM to 5 PM
- The typical duration of the walk component of public transport related trips made by respondents was 0 to 5 minutes.
- The typical duration of walk-only trips made by respondents was 11 to 15 minutes.

A more detailed summary of the survey questionnaire responses are provided in Appendix A.

3. Survey Results

3.1 Traffic Survey Results

3.1.1 Site 1: 13 Herbert Street, St Leonards

Table 22 - Site 1 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	0	5	5	0	6	6	0	0	0	0	0	0	0	5	5	4	11	15	0
6:15 - 7:15	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	4	13	17	0
6:30 - 7:30	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	2	11	13	0
6:45 - 7:45	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	2	15	17	0
7:00 - 8:00	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	4	17	21	0
7:15 - 8:15	1	6	7	1	7	8	0	0	0	0	0	0	1	6	7	6	23	29	0
7:30 - 8:30	2	8	10	2	10	12	0	0	0	0	0	0	2	8	10	7	32	39	0
7:45 - 8:45	2	11	13	2	16	18	0	0	0	0	0	0	2	11	13	7	40	47	0
8:00 - 9:00	2	8	10	2	13	15	0	0	0	0	0	0	2	8	10	4	41	45	0
8:15 - 9:15	1	8	9	1	12	13	0	0	0	0	0	0	1	8	9	2	43	45	0
8:30 - 9:30	2	7	9	2	10	12	0	0	0	0	0	0	2	7	9	3	39	42	0
8:45 - 9:45	6	5	11	6	7	13	0	0	0	0	0	0	6	5	11	8	34	42	0
9:00 - 10:00	6	6	12	6	8	14	0	0	0	0	0	0	6	6	12	10	33	43	0
9:15 - 10:15	6	4	10	6	6	12	0	0	0	0	0	0	6	4	10	11	26	37	0
9:30 - 10:30	4	3	7	4	5	9	0	0	0	0	0	0	4	3	7	10	21	31	0
9:45 - 10:45	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	7	13	20	0
10:00 - 11:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	5	12	17	0
10:15 - 11:15	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	6	12	18	0
10:30 - 11:30	1	2	3	1	3	4	0	0	0	0	0	0	1	2	3	8	11	19	0
10:45 - 11:45	2	2	4	2	3	5	0	0	0	0	0	0	2	2	4	7	10	17	0
11:00 - 12:00	3	2	5	3	3	6	0	0	0	0	0	0	3	2	5	10	13	23	0
11:15 - 12:15	3	0	3	3	0	3	0	0	0	0	0	0	3	0	3	10	10	20	0
11:30 - 12:30	2	0	2	2	1	3	0	0	0	0	0	0	2	0	2	9	12	21	0
11:45 - 12:45	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	8	17	25	0
12:00 - 13:00	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	10	14	24	0
12:15 - 13:15	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	9	14	23	0
12:30 - 13:30	1	2	3	1	1	2	0	0	0	0	0	0	1	2	3	8	16	24	0
12:45 - 13:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	10	12	22	0
13:00 - 14:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	7	10	17	0
13:15 - 14:15	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	7	10	17	0
13:30 - 14:30	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	6	11	17	0
13:45 - 14:45	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	5	11	16	0
14:00 - 15:00	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	4	10	14	0
14:15 - 15:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	4	8	12	0
14:30 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	9	0
14:45 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	9	0
15:00 - 16:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	8	4	12	0
15:15 - 16:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	10	7	17	0
15:30 - 16:30	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	12	9	21	0
15:45 - 16:45	3	1	4	3	1	4	0	0	0	0	0	0	3	1	4	14	10	24	0
16:00 - 17:00	3	2	5	3	2	5	0	0	0	0	0	0	3	2	5	15	10	25	0
16:15 - 17:15	4	3	7	5	4	9	0	0	0	0	0	0	4	3	7	19	9	28	0
16:30 - 17:30	2	4	6	3	5	8	0	0	0	0	0	0	2	4	6	21	8	29	0
16:45 - 17:45	2	4	6	3	5	8	0	0	0	0	0	0	2	4	6	20	10	30	0
17:00 - 18:00	2	3	5	3	4	7	0	0	0	0	0	0	2	3	5	24	14	38	0
17:15 - 18:15	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	20	13	33	0
17:30 - 18:30	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	17	17	34	0
17:45 - 18:45	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	17	18	35	0
18:00 - 19:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	19	14	33	0
Peak	**6**	**11**	**13**	**6**	**16**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**11**	**13**	**24**	**43**	**47**	**0**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 14 - Site 1 Vehicle Trip Generation (Weekday)

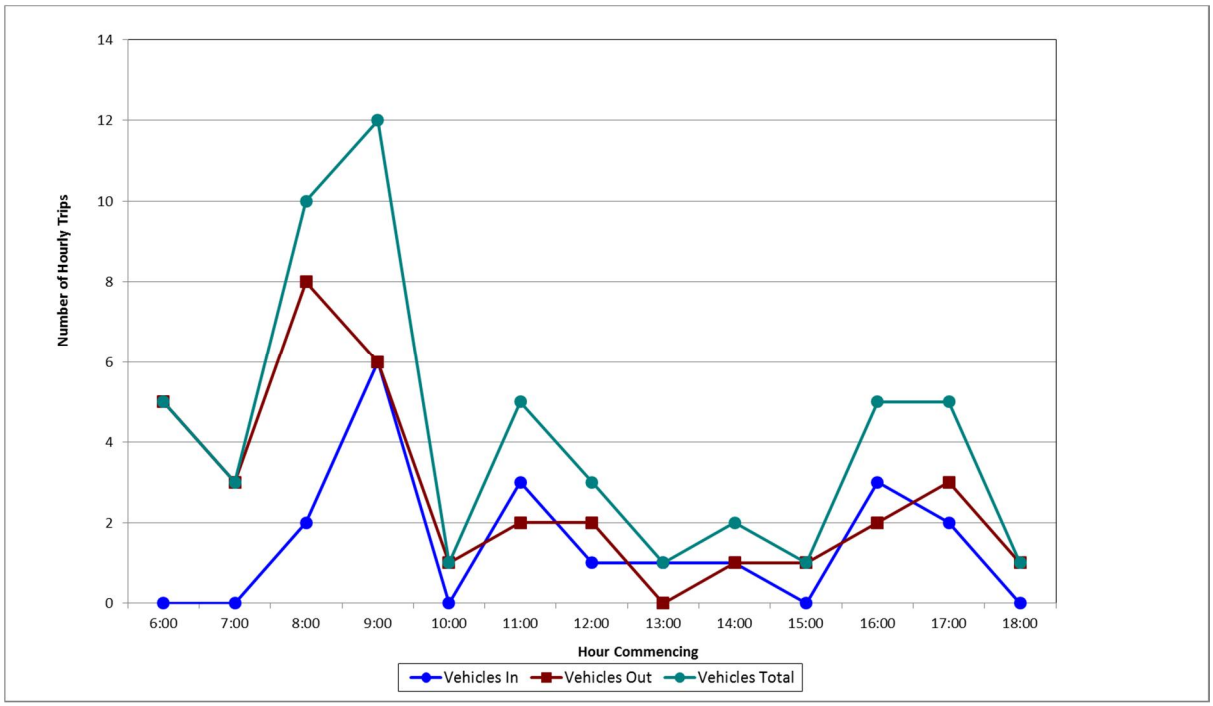


Figure 15 - Site 1 Person Trip Generation (Weekday)

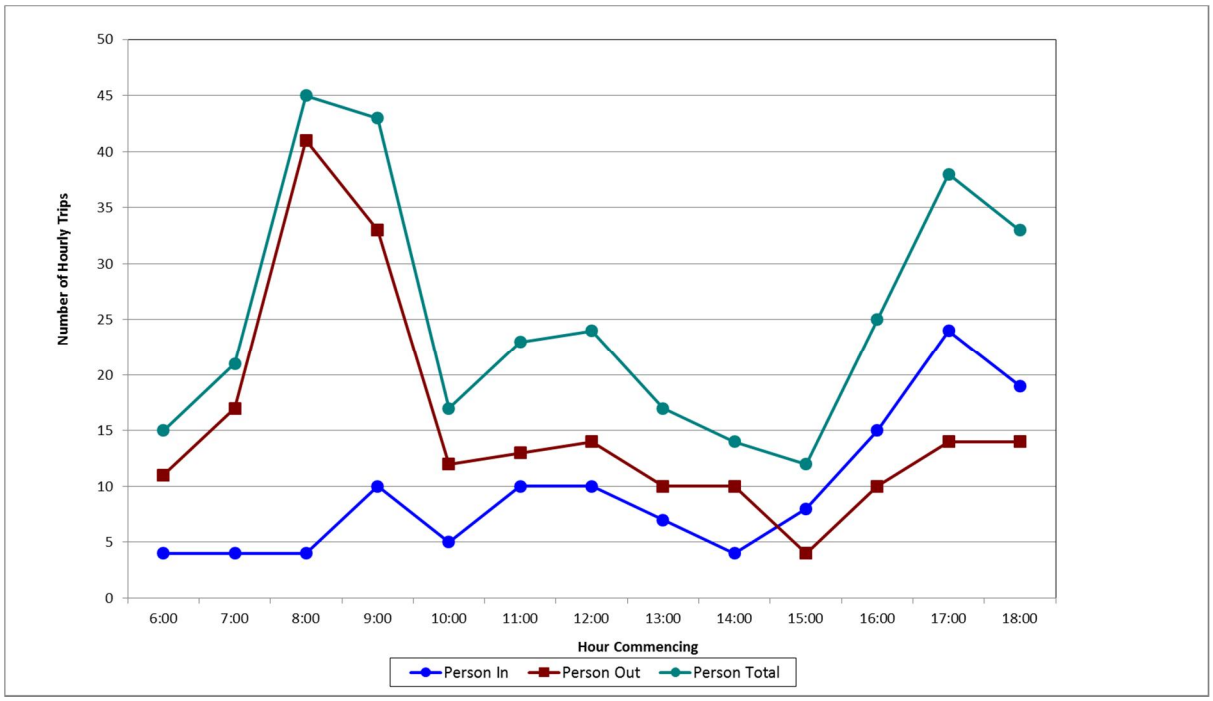


Table 23 - Site 1 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	2	9	11	2	12	14	1	0	1	1	0	1	3	9	12	8	23	31	0
8:15 - 9:15	1	7	8	1	10	11	1	0	1	1	0	1	2	7	9	6	21	27	0
8:30 - 9:30	1	8	9	1	10	11	1	0	1	1	0	1	2	8	10	8	24	32	0
8:45 - 9:45	0	6	6	0	8	8	1	0	1	1	0	1	1	6	7	12	32	44	0
9:00 - 10:00	1	7	8	2	10	12	0	0	0	0	0	0	1	7	8	18	46	64	0
9:15 - 10:15	1	7	8	2	11	13	0	1	1	0	1	1	1	8	9	35	57	92	0
9:30 - 10:30	1	8	9	2	14	16	0	1	1	0	1	1	1	9	10	50	68	118	0
9:45 - 10:45	2	9	11	5	16	21	0	1	1	0	1	1	2	10	12	66	74	140	0
10:00 - 11:00	1	11	12	3	20	23	0	1	1	0	1	1	1	12	13	79	87	166	0
10:15 - 11:15	2	12	14	5	21	26	0	0	0	0	0	0	2	12	14	92	109	201	0
10:30 - 11:30	2	13	15	5	25	30	0	0	0	0	0	0	2	13	15	90	127	217	0
10:45 - 11:45	4	15	19	6	26	32	0	0	0	0	0	0	4	15	19	79	115	194	0
11:00 - 12:00	6	14	20	9	23	32	0	0	0	0	0	0	6	14	20	65	93	158	0
11:15 - 12:15	7	15	22	11	24	35	0	0	0	0	0	0	7	15	22	38	68	106	0
11:30 - 12:30	8	14	22	12	19	31	0	0	0	0	0	0	8	14	22	24	38	62	0
11:45 - 12:45	6	11	17	9	15	24	0	0	0	0	0	0	6	11	17	18	31	49	0
12:00 - 13:00	6	11	17	10	16	26	0	0	0	0	0	0	6	11	17	15	29	44	0
12:15 - 13:15	4	8	12	6	11	17	0	0	0	0	0	0	4	8	12	13	21	34	0
12:30 - 13:30	5	6	11	9	9	18	0	0	0	0	0	0	5	6	11	19	18	37	0
12:45 - 13:45	6	7	13	11	12	23	0	0	0	0	0	0	6	7	13	21	21	42	0
13:00 - 14:00	4	5	9	7	9	16	0	0	0	0	0	0	4	5	9	21	19	40	0
13:15 - 14:15	7	6	13	11	11	22	0	0	0	0	0	0	7	6	13	26	23	49	0
13:30 - 14:30	7	7	14	10	12	22	0	0	0	0	0	0	7	7	14	21	26	47	0
13:45 - 14:45	5	6	11	7	10	17	0	0	0	0	0	0	5	6	11	23	22	45	0
14:00 - 15:00	7	7	14	11	11	22	0	0	0	0	0	0	7	7	14	30	25	55	0
14:15 - 15:15	5	6	11	9	10	19	0	0	0	0	0	0	5	6	11	31	22	53	0
14:30 - 15:30	5	6	11	9	11	20	0	0	0	0	0	0	5	6	11	32	21	53	0
14:45 - 15:45	6	6	12	11	11	22	0	0	0	0	0	0	6	6	12	28	21	49	0
15:00 - 16:00	6	6	12	10	11	21	0	0	0	0	0	0	6	6	12	21	23	44	0
15:15 - 16:15	7	8	15	12	13	25	0	0	0	0	0	0	7	8	15	19	24	43	0
15:30 - 16:30	6	6	12	10	9	19	0	0	0	0	0	0	6	6	12	20	19	39	0
15:45 - 16:45	7	7	14	12	11	23	0	0	0	0	0	0	7	7	14	22	23	45	0
16:00 - 17:00	7	6	13	12	10	22	0	0	0	0	0	0	7	6	13	21	19	40	0
16:15 - 17:15	6	5	11	10	10	20	0	0	0	0	0	0	6	5	11	22	25	47	0
16:30 - 17:30	6	8	14	11	16	27	0	0	0	0	0	0	6	8	14	25	31	56	0
16:45 - 17:45	6	8	14	12	17	29	0	0	0	0	0	0	6	8	14	28	35	63	0
17:00 - 18:00	5	9	14	11	19	30	0	0	0	0	0	0	5	9	14	35	37	72	0
Peak	**8**	**15**	**22**	**12**	**26**	**35**	**1**	**1**	**1**	**1**	**1**	**1**	**8**	**15**	**22**	**92**	**127**	**217**	**0**

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 16 - Site 1 Vehicle Trip Generation (Saturday)

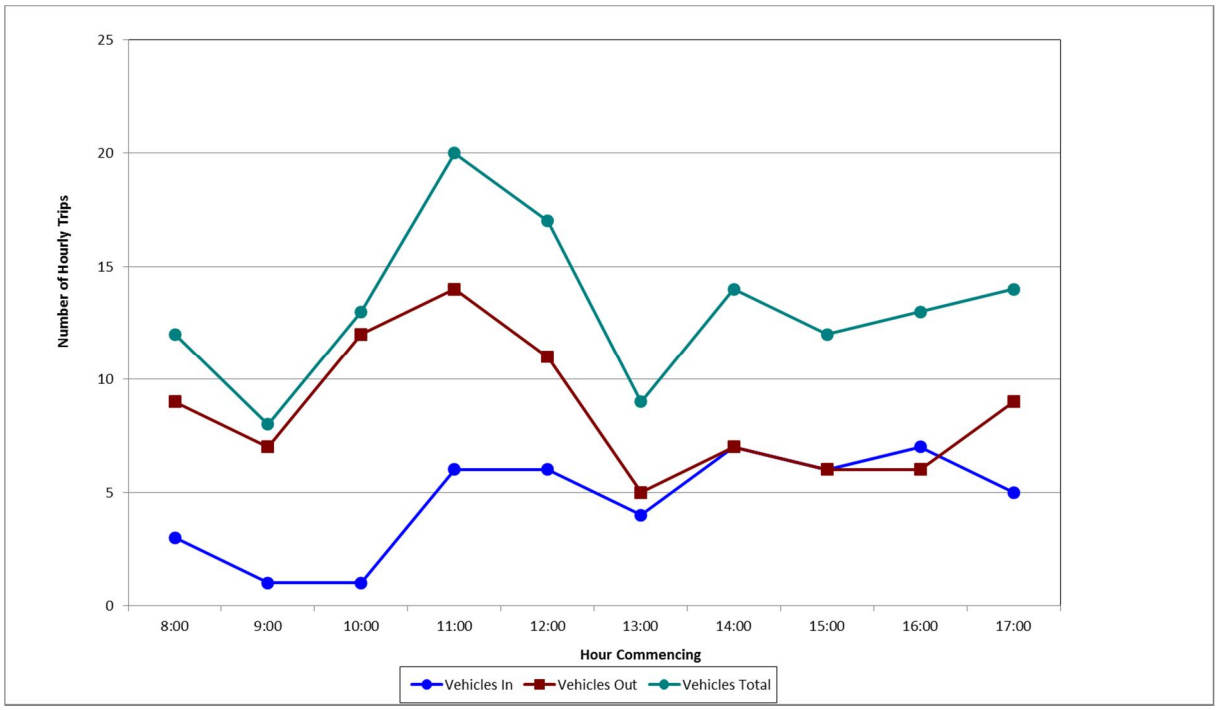
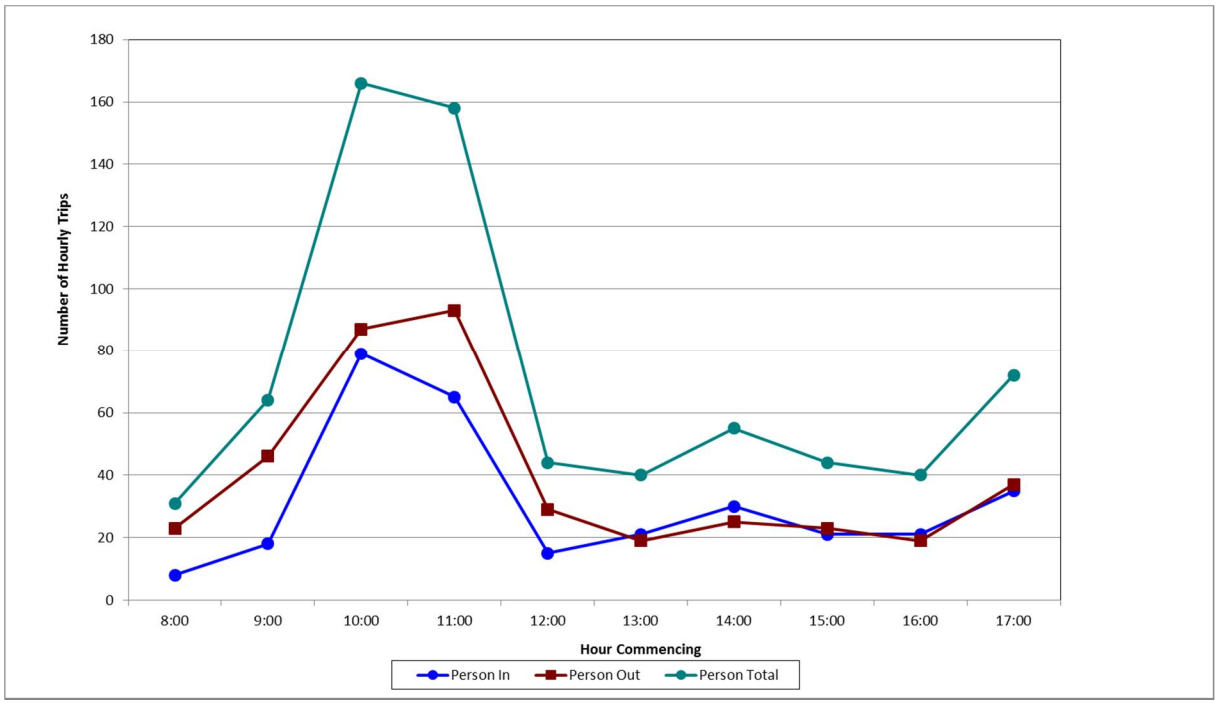


Figure 17 - Site 1 Person Trip Generation (Saturday)



3.1.2 Site 2: 1 Cambridge Lane, Chatswood

Table 24 - Site 2 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	2	1	3	2	2	4	0	0	0	0	0	0	2	1	3	7	10	17	2
6:15 - 7:15	0	2	2	0	4	4	0	0	0	0	0	0	0	2	2	5	16	21	2
6:30 - 7:30	1	4	5	1	6	7	0	0	0	0	0	0	1	4	5	6	25	31	2
6:45 - 7:45	4	6	10	4	7	11	0	0	0	0	0	0	4	6	10	8	38	46	2
7:00 - 8:00	4	9	13	4	10	14	0	0	0	0	0	0	4	9	13	8	46	54	5
7:15 - 8:15	5	13	18	5	16	21	0	0	0	0	0	0	5	13	18	11	55	66	5
7:30 - 8:30	5	14	19	5	17	22	0	0	0	0	0	0	5	14	19	15	55	70	8
7:45 - 8:45	2	11	13	2	14	16	0	0	0	0	0	0	2	11	13	12	54	66	10
8:00 - 9:00	6	12	18	7	18	25	0	0	0	0	0	0	6	12	18	18	65	83	7
8:15 - 9:15	5	10	15	6	16	22	0	0	0	0	0	0	5	10	15	19	74	93	11
8:30 - 9:30	5	9	14	6	15	21	0	0	0	0	0	0	5	9	14	18	79	97	12
8:45 - 9:45	7	11	18	8	18	26	0	0	0	0	0	0	7	11	18	21	71	92	12
9:00 - 10:00	3	8	11	3	12	15	0	0	0	0	0	0	3	8	11	16	58	74	12
9:15 - 10:15	3	6	9	3	8	11	0	0	0	0	0	0	3	6	9	12	42	54	7
9:30 - 10:30	2	4	6	2	6	8	0	0	0	0	0	0	2	4	6	12	32	44	3
9:45 - 10:45	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	8	22	30	3
10:00 - 11:00	1	6	7	2	10	12	0	0	0	0	0	0	1	6	7	12	23	35	4
10:15 - 11:15	1	8	9	2	12	14	0	0	0	0	0	0	1	8	9	17	24	41	7
10:30 - 11:30	5	8	13	11	12	23	0	0	0	0	0	0	5	8	13	23	27	50	8
10:45 - 11:45	6	7	13	13	11	24	0	0	0	0	0	0	6	7	13	28	27	55	6
11:00 - 12:00	6	4	10	13	5	18	0	0	0	0	0	0	6	4	10	31	28	59	7
11:15 - 12:15	8	1	9	20	1	21	0	0	0	0	0	0	8	1	9	36	31	67	6
11:30 - 12:30	9	3	12	19	4	23	0	0	0	0	0	0	9	3	12	41	38	79	6
11:45 - 12:45	9	3	12	18	4	22	0	0	0	0	0	0	9	3	12	40	45	85	6
12:00 - 13:00	8	2	10	16	3	19	0	0	0	0	0	0	8	2	10	34	37	71	6
12:15 - 13:15	7	3	10	10	4	14	0	0	0	0	0	0	7	3	10	25	30	55	6
12:30 - 13:30	4	2	6	4	3	7	0	0	0	0	0	0	4	2	6	12	20	32	6
12:45 - 13:45	4	4	8	4	5	9	0	0	0	0	0	0	4	4	8	15	19	34	7
13:00 - 14:00	5	6	11	5	7	12	0	0	0	0	0	0	5	6	11	16	25	41	4
13:15 - 14:15	7	5	12	7	6	13	0	0	0	0	0	0	7	5	12	24	24	48	2
13:30 - 14:30	6	5	11	6	5	11	0	0	0	0	0	0	6	5	11	36	25	61	4
13:45 - 14:45	6	5	11	8	6	14	0	0	0	0	0	0	6	5	11	39	23	62	3
14:00 - 15:00	6	4	10	9	6	15	0	0	0	0	0	0	6	4	10	44	21	65	5
14:15 - 15:15	4	7	11	8	11	19	0	0	0	0	0	0	4	7	11	42	36	78	7
14:30 - 15:30	3	9	12	7	15	22	0	0	0	0	0	0	3	9	12	35	40	75	9
14:45 - 15:45	5	8	13	9	13	22	0	0	0	0	0	0	5	8	13	39	40	79	10
15:00 - 16:00	5	8	13	8	12	20	0	0	0	0	0	0	5	8	13	57	43	100	8
15:15 - 16:15	6	7	13	8	9	17	0	0	0	0	0	0	6	7	13	64	39	103	9
15:30 - 16:30	7	5	12	10	6	16	0	0	0	0	0	0	7	5	12	63	36	99	5
15:45 - 16:45	9	6	15	14	9	23	0	0	0	0	0	0	9	6	15	71	44	115	7
16:00 - 17:00	9	6	15	15	9	24	0	0	0	0	0	0	9	6	15	63	43	106	10
16:15 - 17:15	9	6	15	17	11	28	0	0	0	0	0	0	9	6	15	66	36	102	10
16:30 - 17:30	12	5	17	25	9	34	0	0	0	0	0	0	12	5	17	89	38	127	12
16:45 - 17:45	9	4	13	18	7	25	0	0	0	0	0	0	9	4	13	77	34	111	11
17:00 - 18:00	10	3	13	18	6	24	0	0	0	0	0	0	10	3	13	86	31	117	10
17:15 - 18:15	13	3	16	25	6	31	0	0	0	0	0	0	13	3	16	92	37	129	10
17:30 - 18:30	15	4	19	23	7	30	0	0	0	0	0	0	15	4	19	87	33	120	10
17:45 - 18:45	17	8	25	29	12	41	0	0	0	0	0	0	17	8	25	94	35	129	12
18:00 - 19:00	16	9	25	29	14	43	0	0	0	0	0	0	16	9	25	81	41	122	12
Peak	**17**	**14**	**25**	**29**	**18**	**43**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**14**	**25**	**94**	**79**	**129**	**12**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 18 - Site 2 Vehicle Trip Generation (Weekday)

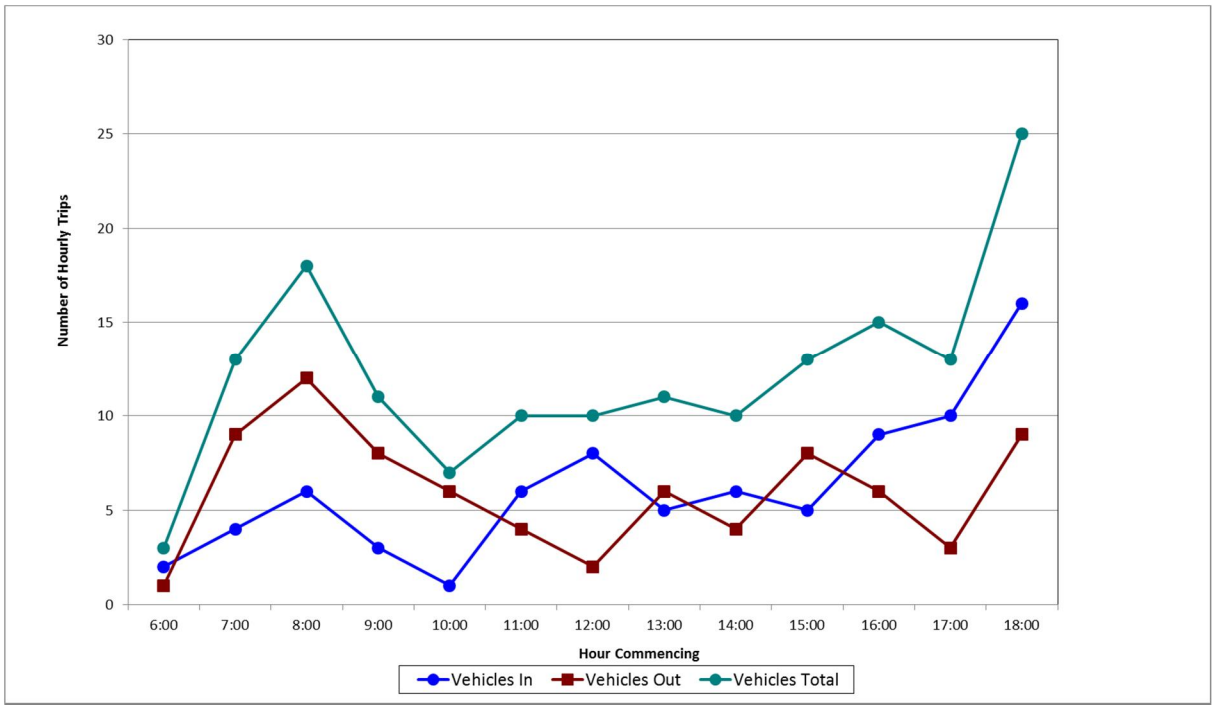


Figure 19 - Site 2 Person Trip Generation (Weekday)

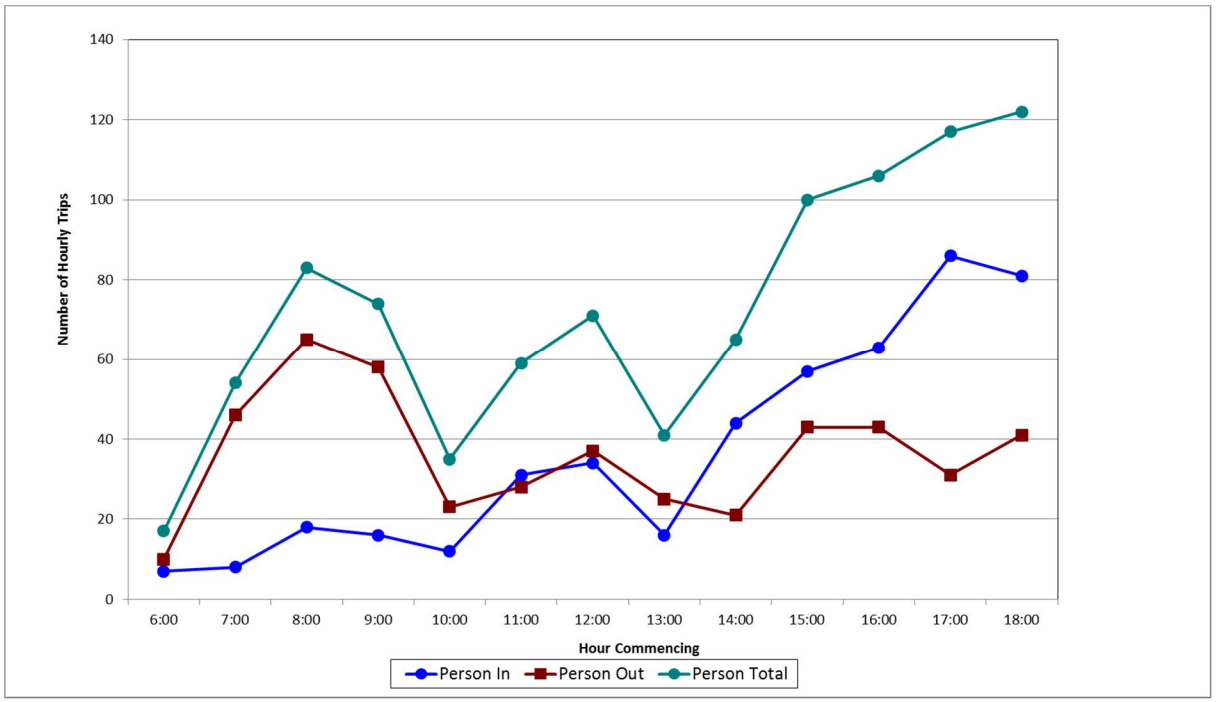


Table 25 - Site 2 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 - 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 8:15	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	0	2	2	4
7:30 - 8:30	0	5	5	0	6	6	0	0	0	0	0	0	0	5	5	3	11	14	9
7:45 - 8:45	0	11	11	0	12	12	0	0	0	0	0	0	0	11	11	3	21	24	16
8:00 - 9:00	0	14	14	0	15	15	0	0	0	0	0	0	0	14	14	5	28	33	23
8:15 - 9:15	2	13	15	2	14	16	0	0	0	0	0	0	2	13	15	16	35	51	26
8:30 - 9:30	2	13	15	2	14	16	2	0	2	2	0	2	4	13	17	17	37	54	27
8:45 - 9:45	4	8	12	4	9	13	2	0	2	2	0	2	6	8	14	22	38	60	25
9:00 - 10:00	6	7	13	7	12	19	2	0	2	2	0	2	8	7	15	24	60	84	24
9:15 - 10:15	6	7	13	7	12	19	2	2	4	2	2	4	8	9	17	17	66	83	23
9:30 - 10:30	8	8	16	10	15	25	0	2	2	0	2	2	8	10	18	24	72	96	23
9:45 - 10:45	12	9	21	20	16	36	0	2	2	0	2	2	12	11	23	38	69	107	25
10:00 - 11:00	10	10	20	17	16	33	0	2	2	0	2	2	10	12	22	37	51	88	26
10:15 - 11:15	11	11	22	19	17	36	0	0	0	0	0	0	11	11	22	44	43	87	27
10:30 - 11:30	11	10	21	22	17	39	0	0	0	0	0	0	11	10	21	50	42	92	28
10:45 - 11:45	8	17	25	15	23	38	0	0	0	0	0	0	8	17	25	52	55	107	28
11:00 - 12:00	9	18	27	16	24	40	0	0	0	0	0	0	9	18	27	62	62	124	28
11:15 - 12:15	7	16	23	13	22	35	0	0	0	0	0	0	7	16	23	64	64	128	28
11:30 - 12:30	12	14	26	15	16	31	0	0	0	0	0	0	12	14	26	65	52	117	28
11:45 - 12:45	10	10	20	11	17	28	0	0	0	0	0	0	10	10	20	51	48	99	28
12:00 - 13:00	13	7	20	19	14	33	1	0	1	1	0	1	14	7	21	51	41	92	28
12:15 - 13:15	16	9	25	23	16	39	1	0	1	3	0	3	17	9	26	48	38	86	28
12:30 - 13:30	14	9	23	20	17	37	1	1	2	3	2	5	15	10	25	45	43	88	28
12:45 - 13:45	13	5	18	19	10	29	1	1	2	3	2	5	14	6	20	43	35	78	28
13:00 - 14:00	9	5	14	10	9	19	0	1	1	2	2	4	9	6	15	32	34	66	28
13:15 - 14:15	9	3	12	13	7	20	0	1	1	0	2	2	9	4	13	44	41	85	28
13:30 - 14:30	5	6	11	12	14	26	0	0	0	0	0	0	5	6	11	51	46	97	28
13:45 - 14:45	7	8	15	15	16	31	1	1	2	1	1	2	8	9	17	62	48	110	27
14:00 - 15:00	10	10	20	20	19	39	1	1	2	1	1	2	11	11	22	77	55	132	26
14:15 - 15:15	7	11	18	14	22	36	1	1	2	1	1	2	8	12	20	66	58	124	25
14:30 - 15:30	7	9	16	11	17	28	1	1	2	1	1	2	8	10	18	51	54	105	22
14:45 - 15:45	5	8	13	8	17	25	0	0	0	0	0	0	5	8	13	55	58	113	20
15:00 - 16:00	6	8	14	8	16	24	0	0	0	0	0	0	6	8	14	59	56	115	20
15:15 - 16:15	8	8	16	12	14	26	0	0	0	0	0	0	8	8	16	59	41	100	20
15:30 - 16:30	8	8	16	12	13	25	0	0	0	0	0	0	8	8	16	64	41	105	22
15:45 - 16:45	9	9	18	13	13	26	0	0	0	0	0	0	9	9	18	51	42	93	23
16:00 - 17:00	9	10	19	17	14	31	0	0	0	0	0	0	9	10	19	57	45	102	21
16:15 - 17:15	8	9	17	13	13	26	0	1	1	0	1	1	8	10	18	58	56	114	20
16:30 - 17:30	10	8	18	17	14	31	0	1	1	0	1	1	10	9	19	65	57	122	19
16:45 - 17:45	10	7	17	17	14	31	0	1	1	0	1	1	10	8	18	76	49	125	20
17:00 - 18:00	8	4	12	13	10	23	0	1	1	0	1	1	8	5	13	59	38	97	22
Peak	16	18	27	23	24	40	2	2	4	3	2	5	17	18	27	77	72	132	28

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 20 - Site 2 Vehicle Trip Generation (Saturday)

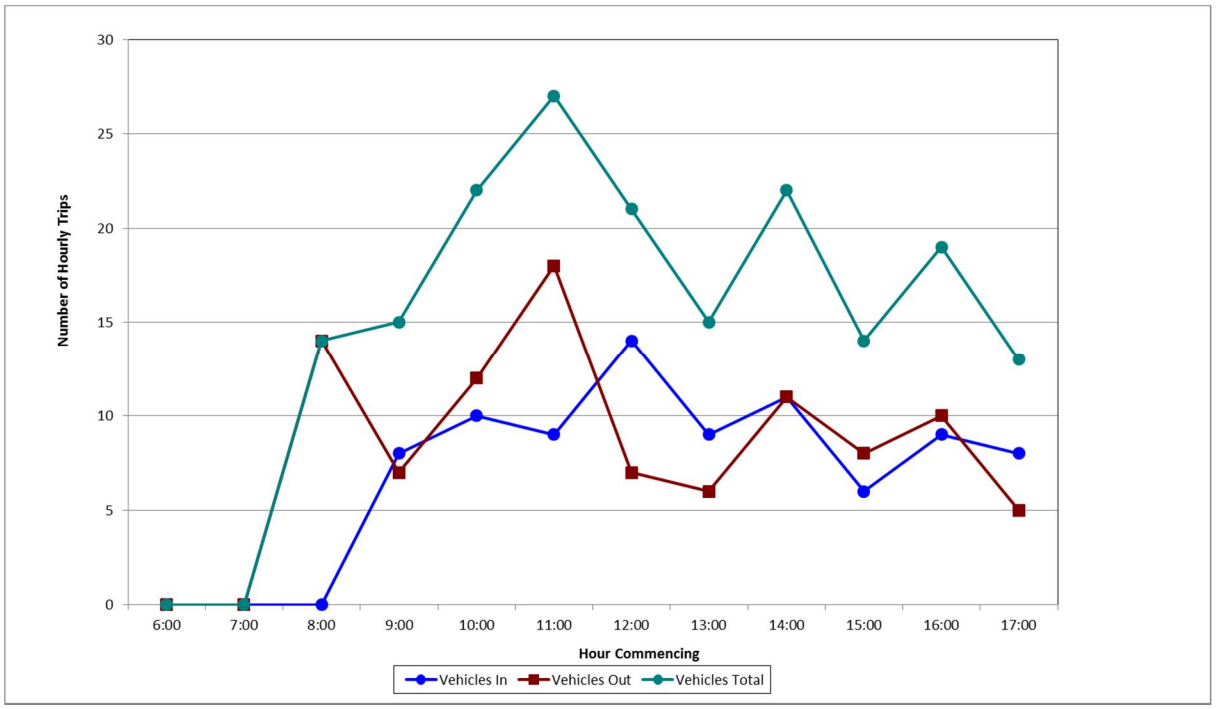
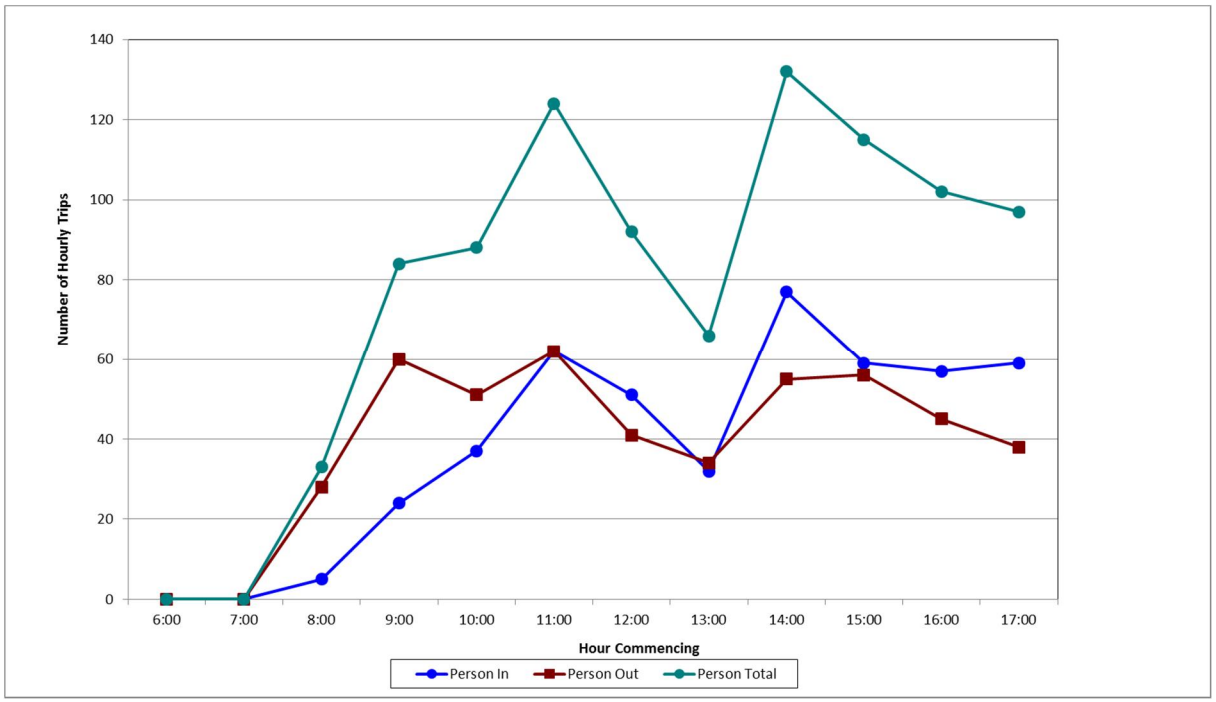


Figure 21 - Site 2 Vehicle Trip Generation (Saturday)



3.1.3 Site 3: 8-12 Waratah Street, Cronulla

Table 26 - Site 3 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	1	8	9	6
6:15 - 7:15	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	3	4	7	9
6:30 - 7:30	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	4	3	7	12
6:45 - 7:45	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	6	3	9	13
7:00 - 8:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	7	5	12	14
7:15 - 8:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	5	6	11	14
7:30 - 8:30	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	5	7	12	14
7:45 - 8:45	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	3	8	11	14
8:00 - 9:00	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	2	7	9	14
8:15 - 9:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	2	5	7	13
8:30 - 9:30	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	1	5	6	13
8:45 - 9:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	2	3	5	14
9:00 - 10:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	2	2	4	15
9:15 - 10:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	3	2	5	17
9:30 - 10:30	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	2	1	3	18
9:45 - 10:45	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	1	2	19
10:00 - 11:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	1	2	20
10:15 - 11:15	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	1	2	3	20
10:30 - 11:30	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	3	2	5	18
10:45 - 11:45	1	3	4	1	3	4	0	0	0	0	0	0	1	3	4	3	3	6	15
11:00 - 12:00	1	3	4	1	3	4	0	0	0	0	0	0	1	3	4	3	3	6	13
11:15 - 12:15	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	2	2	4	11
11:30 - 12:30	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	2	2	11
11:45 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	12
12:00 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	11
12:15 - 13:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	3	2	5	10
12:30 - 13:30	2	2	4	3	2	5	0	0	0	0	0	0	2	2	4	6	2	8	9
12:45 - 13:45	2	2	4	3	2	5	0	0	0	0	0	0	2	2	4	5	2	7	9
13:00 - 14:00	4	3	7	5	3	8	0	0	0	0	0	0	4	3	7	9	7	16	12
13:15 - 14:15	4	2	6	5	2	7	0	0	0	0	0	0	4	2	6	10	8	18	15
13:30 - 14:30	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	8	8	16	18
13:45 - 14:45	3	1	4	3	1	4	0	0	0	0	0	0	3	1	4	9	8	17	20
14:00 - 15:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	4	3	7	20
14:15 - 15:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	3	1	4	18
14:30 - 15:30	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	2	1	3	16
14:45 - 15:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	1	2	3	14
15:00 - 16:00	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	6	3	9	12
15:15 - 16:15	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	6	4	10	13
15:30 - 16:30	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	9	3	12	13
15:45 - 16:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	8	2	10	13
16:00 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	7	13
16:15 - 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6	12
16:30 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	9	12
16:45 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	11	12
17:00 - 18:00	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	7	5	12	11
17:15 - 18:15	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	8	5	13	10
17:30 - 18:30	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	3	4	7	9
17:45 - 18:45	4	0	4	4	0	4	0	0	0	0	0	0	4	0	4	5	2	7	8
18:00 - 19:00	3	0	3	3	0	3	0	0	0	0	0	0	3	0	3	4	0	4	8
Peak	**4**	**3**	**7**	**5**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**7**	**10**	**8**	**18**	**20**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 22 - Site 3 Vehicle Trip Generation (Weekday)

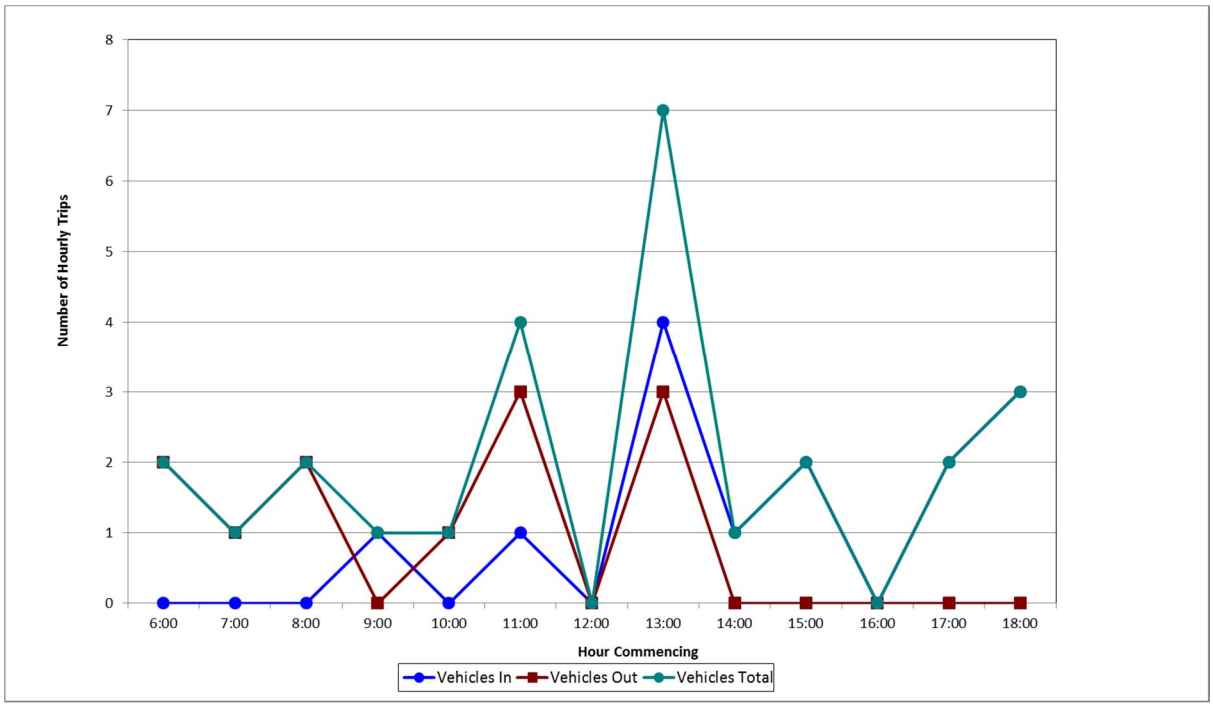


Figure 23 - Site 3 Person Trip Generation (Weekday)

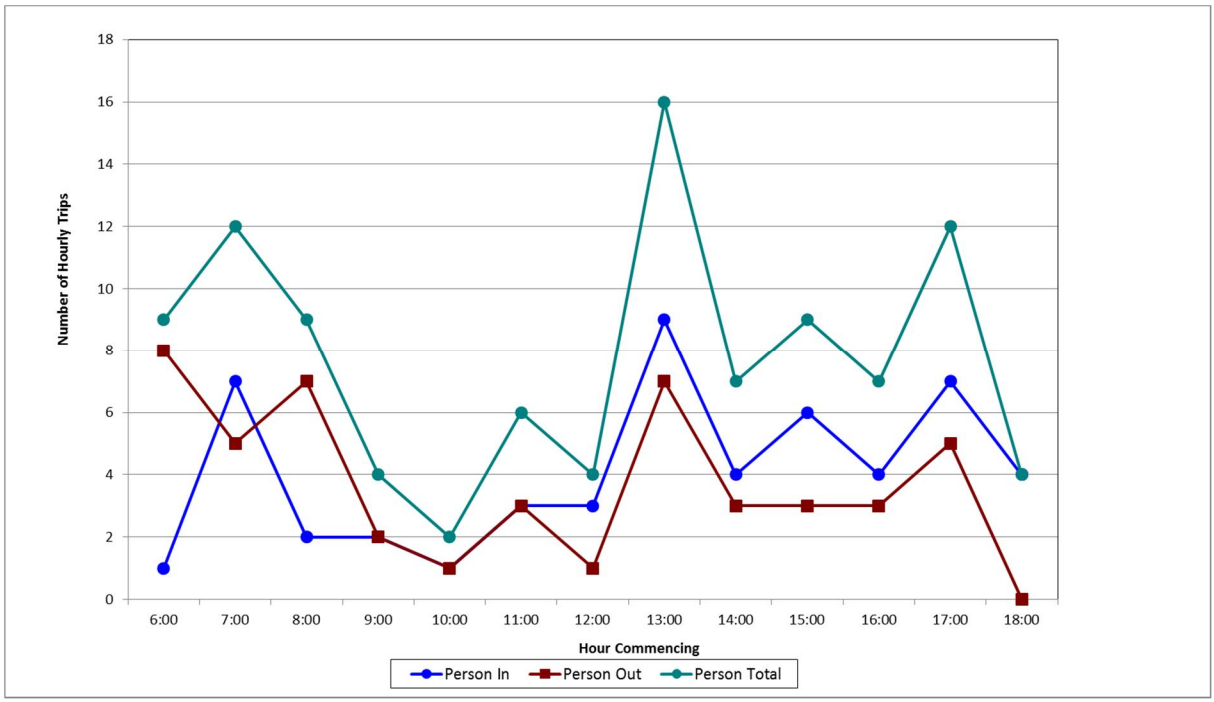


Table 27 - Site 3 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	8	3	11	11
8:15 - 9:15	2	2	4	2	4	6	0	0	0	0	0	0	2	2	4	4	6	10	10
8:30 - 9:30	2	2	4	2	4	6	0	0	0	0	0	0	2	2	4	5	10	15	9
8:45 - 9:45	0	3	3	0	5	5	0	0	0	0	0	0	0	3	3	4	14	18	8
9:00 - 10:00	1	4	5	2	6	8	0	0	0	0	0	0	1	4	5	7	16	23	8
9:15 - 10:15	1	2	3	2	2	4	0	0	0	0	0	0	1	2	3	6	11	17	8
9:30 - 10:30	1	2	3	2	2	4	0	0	0	0	0	0	1	2	3	4	7	11	8
9:45 - 10:45	1	1	2	2	1	3	0	0	0	0	0	0	1	1	2	6	3	9	10
10:00 - 11:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	4	2	6	11
10:15 - 11:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	5	2	7	12
10:30 - 11:30	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	7	5	12	12
10:45 - 11:45	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	4	7	11	11
11:00 - 12:00	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	6	5	11	12
11:15 - 12:15	1	2	3	2	3	5	0	0	0	0	0	0	1	2	3	8	5	13	13
11:30 - 12:30	1	2	3	2	3	5	0	0	0	0	0	0	1	2	3	8	3	11	16
11:45 - 12:45	1	1	2	2	1	3	0	0	0	0	0	0	1	1	2	10	2	12	19
12:00 - 13:00	1	2	3	2	3	5	0	0	0	0	0	0	1	2	3	7	8	15	19
12:15 - 13:15	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	4	10	14	19
12:30 - 13:30	0	1	1	0	2	2	0	0	0	0	0	0	0	1	1	4	11	15	15
12:45 - 13:45	1	1	2	2	2	4	0	0	0	0	0	0	1	1	2	4	10	14	10
13:00 - 14:00	1	0	1	2	0	2	0	0	0	0	0	0	1	0	1	4	4	8	7
13:15 - 14:15	1	0	1	2	0	2	0	0	0	0	0	0	1	0	1	5	2	7	5
13:30 - 14:30	1	0	1	2	0	2	0	0	0	0	0	0	1	0	1	4	0	4	6
13:45 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	8
14:00 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	10	11
14:15 - 15:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	8	4	12	12
14:30 - 15:30	1	1	2	1	3	4	0	0	0	0	0	0	1	1	2	13	7	20	13
14:45 - 15:45	1	1	2	1	3	4	0	0	0	0	0	0	1	1	2	10	6	16	13
15:00 - 16:00	1	1	2	1	3	4	0	0	0	0	0	0	1	1	2	7	7	14	12
15:15 - 16:15	0	1	1	0	3	3	0	0	0	0	0	0	0	1	1	10	5	15	15
15:30 - 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	11	18
15:45 - 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12	21
16:00 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4	12	24
16:15 - 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	11	22
16:30 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	20
16:45 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	17
17:00 - 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	14
Peak	**2**	**4**	**5**	**2**	**6**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**5**	**13**	**16**	**23**	**24**

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 24 – Site 3 Vehicle Trip Generation (Saturday)

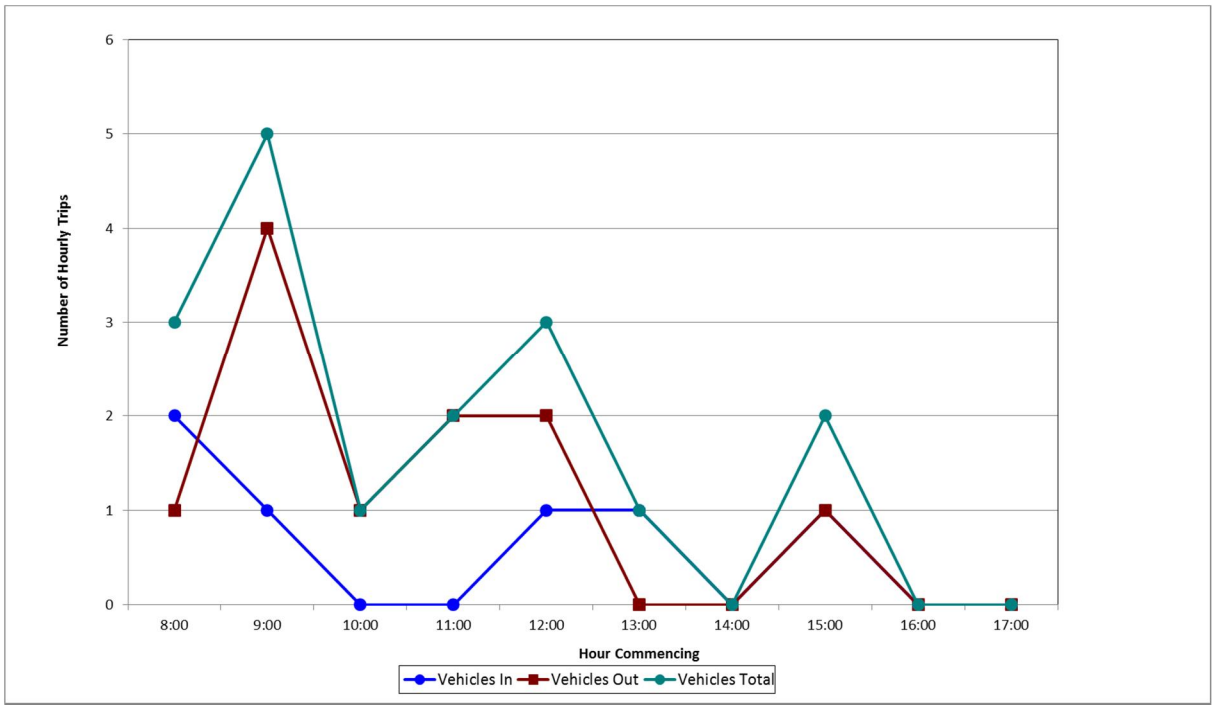
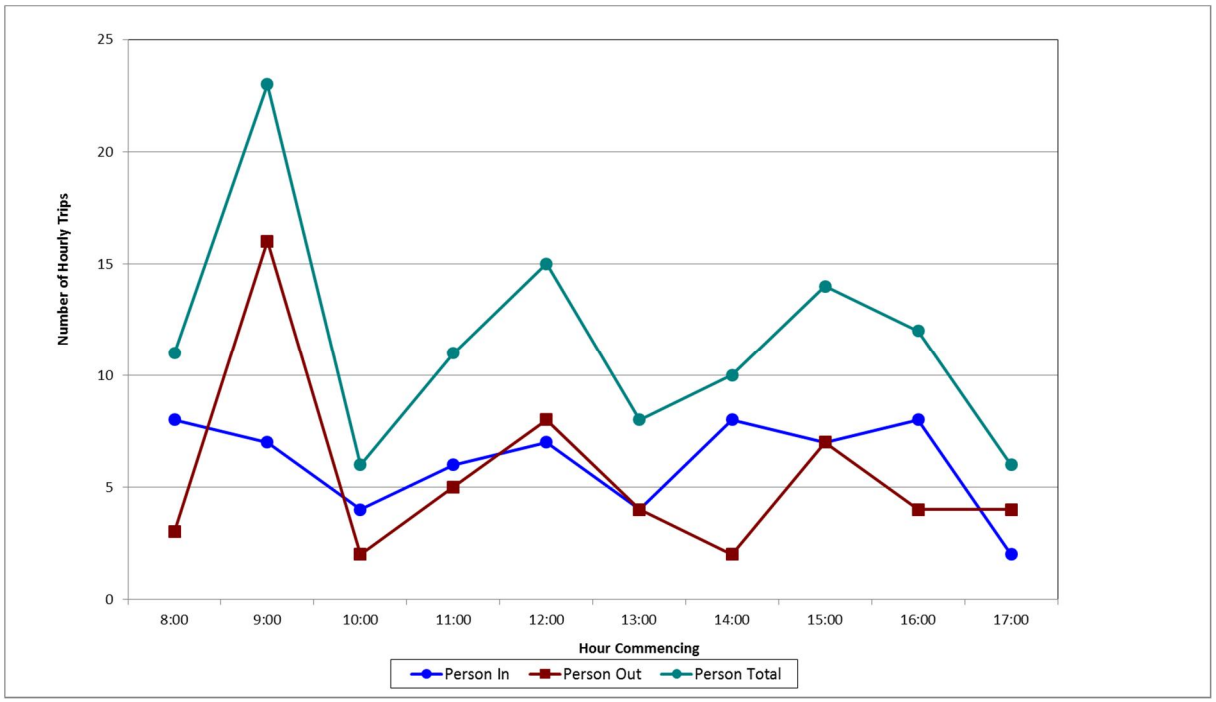


Figure 25 – Site 3 Person Trip Generation (Saturday)



3.1.4 Site 4: 2-8 Ashton Road, Rockdale

Table 28 - Site 4 Survey Results (Weekday Hourly, All Accesses)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	8	22	30	12	39	51	0	1	1	0	2	2	8	23	31	26	56	82	10
6:15 - 7:15	12	24	36	18	43	61	0	1	1	0	2	2	12	25	37	35	70	105	14
6:30 - 7:30	19	27	46	29	48	77	0	2	2	0	3	3	19	29	48	46	77	123	16
6:45 - 7:45	17	36	53	23	61	84	0	2	2	0	3	3	17	38	55	45	95	140	17
7:00 - 8:00	18	48	66	25	75	100	0	2	2	0	2	2	18	50	68	43	121	164	17
7:15 - 8:15	16	52	68	21	81	102	0	2	2	0	2	2	16	54	70	41	148	189	20
7:30 - 8:30	12	54	66	14	84	98	0	1	1	0	1	1	12	55	67	32	157	189	23
7:45 - 8:45	18	57	75	20	82	102	0	1	1	0	1	1	18	58	76	35	159	194	24
8:00 - 9:00	21	54	75	22	77	99	1	0	1	0	0	0	22	54	76	39	150	189	25
8:15 - 9:15	23	50	73	26	71	97	1	0	1	0	0	0	24	50	74	40	134	174	23
8:30 - 9:30	24	42	66	27	59	86	1	1	2	0	1	1	25	43	68	47	119	166	22
8:45 - 9:45	18	32	50	21	50	71	1	1	2	0	1	1	19	33	52	46	108	154	22
9:00 - 10:00	16	22	38	19	33	52	0	2	2	0	2	2	16	24	40	48	82	130	22
9:15 - 10:15	12	22	34	13	29	42	0	2	2	0	2	2	12	24	36	40	65	105	24
9:30 - 10:30	10	22	32	11	26	37	0	1	1	0	1	1	10	23	33	39	67	106	24
9:45 - 10:45	9	20	29	11	22	33	0	2	2	0	2	2	9	22	31	35	57	92	22
10:00 - 11:00	6	22	28	8	27	35	0	1	1	0	1	1	6	23	29	29	65	94	27
10:15 - 11:15	6	21	27	8	31	39	0	1	1	0	1	1	6	22	28	31	65	96	30
10:30 - 11:30	6	17	23	7	28	35	0	2	2	0	2	2	6	19	25	22	53	75	32
10:45 - 11:45	7	15	22	8	26	34	0	1	1	0	1	1	7	16	23	24	56	80	34
11:00 - 12:00	10	15	25	14	23	37	0	1	1	0	1	1	10	16	26	30	52	82	30
11:15 - 12:15	15	12	27	20	15	35	0	1	1	0	1	1	15	13	28	30	44	74	24
11:30 - 12:30	19	17	36	24	21	45	0	0	0	0	0	0	19	17	36	38	48	86	21
11:45 - 12:45	21	22	43	27	29	56	0	0	0	0	0	0	21	22	43	43	52	95	21
12:00 - 13:00	21	17	38	27	24	51	0	0	0	0	0	0	21	17	38	42	37	79	19
12:15 - 13:15	17	19	36	22	27	49	0	0	0	0	0	0	17	19	36	40	41	81	20
12:30 - 13:30	15	16	31	21	26	47	0	0	0	0	0	0	15	16	31	36	38	74	21
12:45 - 13:45	11	17	28	15	23	38	0	0	0	0	0	0	11	17	28	27	35	62	21
13:00 - 14:00	12	16	28	13	21	34	0	0	0	0	0	0	12	16	28	24	39	63	21
13:15 - 14:15	15	16	31	20	22	42	0	0	0	0	0	0	15	16	31	30	40	70	21
13:30 - 14:30	18	14	32	23	17	40	1	1	2	0	4	4	19	15	34	36	43	79	19
13:45 - 14:45	21	13	34	25	16	41	2	1	3	0	4	4	23	14	37	36	39	75	18
14:00 - 15:00	20	12	32	28	15	43	2	1	3	0	4	4	22	13	35	46	37	83	18
14:15 - 15:15	18	11	29	22	11	33	2	1	3	0	4	4	20	12	32	50	34	84	19
14:30 - 15:30	17	11	28	22	11	33	1	0	1	0	0	0	18	11	29	64	31	95	25
14:45 - 15:45	17	8	25	24	9	33	0	0	0	0	0	0	17	8	25	71	32	103	24
15:00 - 16:00	18	8	26	23	9	32	1	1	2	0	1	1	19	9	28	81	35	116	26
15:15 - 16:15	17	9	26	21	12	33	2	1	3	2	1	3	19	10	29	89	37	126	25
15:30 - 16:30	15	11	26	18	15	33	2	1	3	2	1	3	17	12	29	73	39	112	23
15:45 - 16:45	19	14	33	24	17	41	2	1	3	2	1	3	21	15	36	81	40	121	26
16:00 - 17:00	21	21	42	28	26	54	1	0	1	2	0	2	22	21	43	81	48	129	25
16:15 - 17:15	25	20	45	35	25	60	0	0	0	0	0	0	25	20	45	76	51	127	27
16:30 - 17:30	27	18	45	40	20	60	1	0	1	1	1	2	28	18	46	103	53	156	32
16:45 - 17:45	30	17	47	42	20	62	1	1	2	1	1	2	31	18	49	102	58	160	30
17:00 - 18:00	26	14	40	38	17	55	1	1	2	1	1	2	27	15	42	106	59	165	30
17:15 - 18:15	27	14	41	40	15	55	1	1	2	1	1	2	28	15	43	111	50	161	31
17:30 - 18:30	24	15	39	33	17	50	0	1	1	0	0	0	24	16	40	85	51	136	27
17:45 - 18:45	25	16	41	38	18	56	0	0	0	0	0	0	25	16	41	92	52	144	29
18:00 - 19:00	25	17	42	40	18	58	1	0	1	1	1	2	26	17	43	79	44	123	32
Peak	**30**	**57**	**75**	**42**	**84**	**102**	**2**	**2**	**3**	**2**	**4**	**4**	**31**	**58**	**76**	**111**	**159**	**194**	**34**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 26 - Site 4 Vehicle Trip Generation (Weekday South Access)

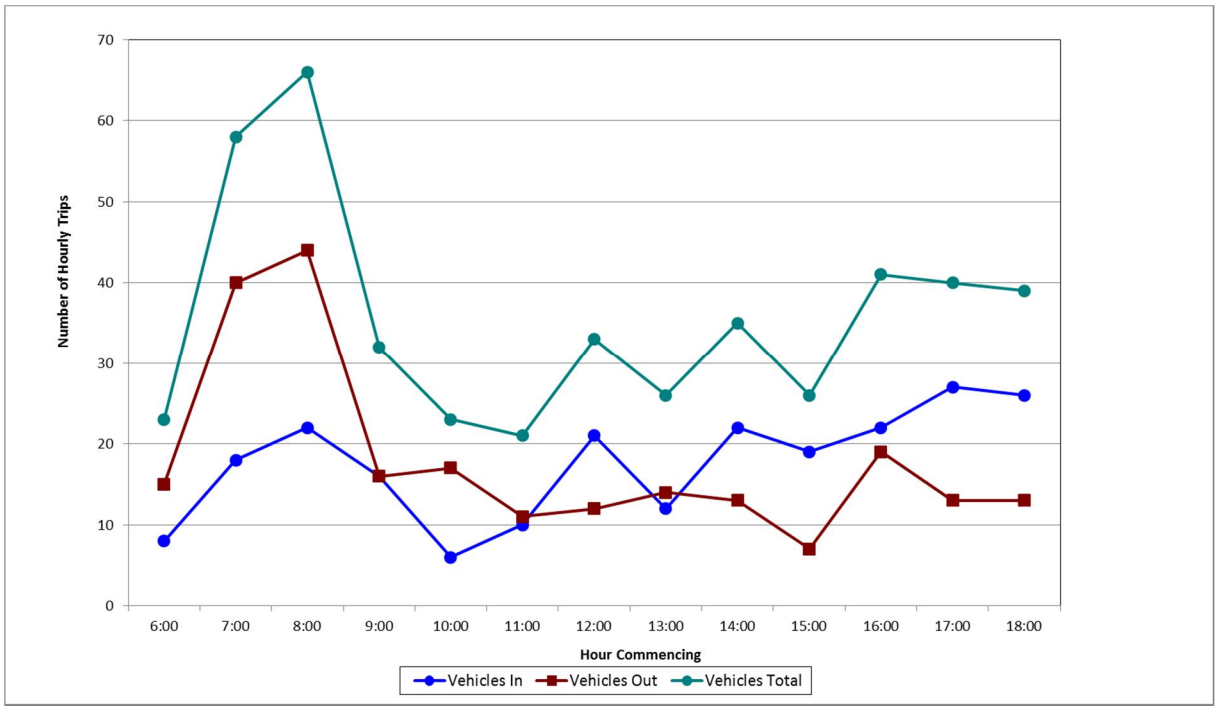


Figure 27 - Site 4 Person Trip Generation (Weekday South Access)

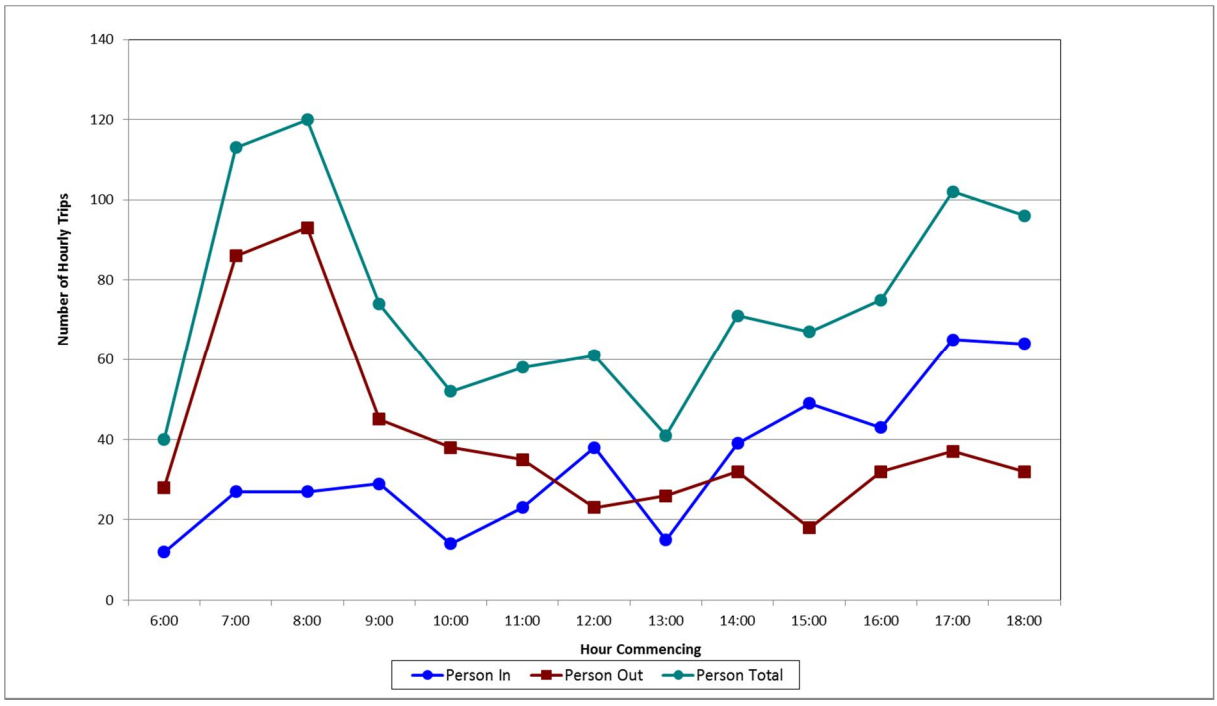


Figure 28 - Site 4 Vehicle Trip Generation (Weekday North Access)

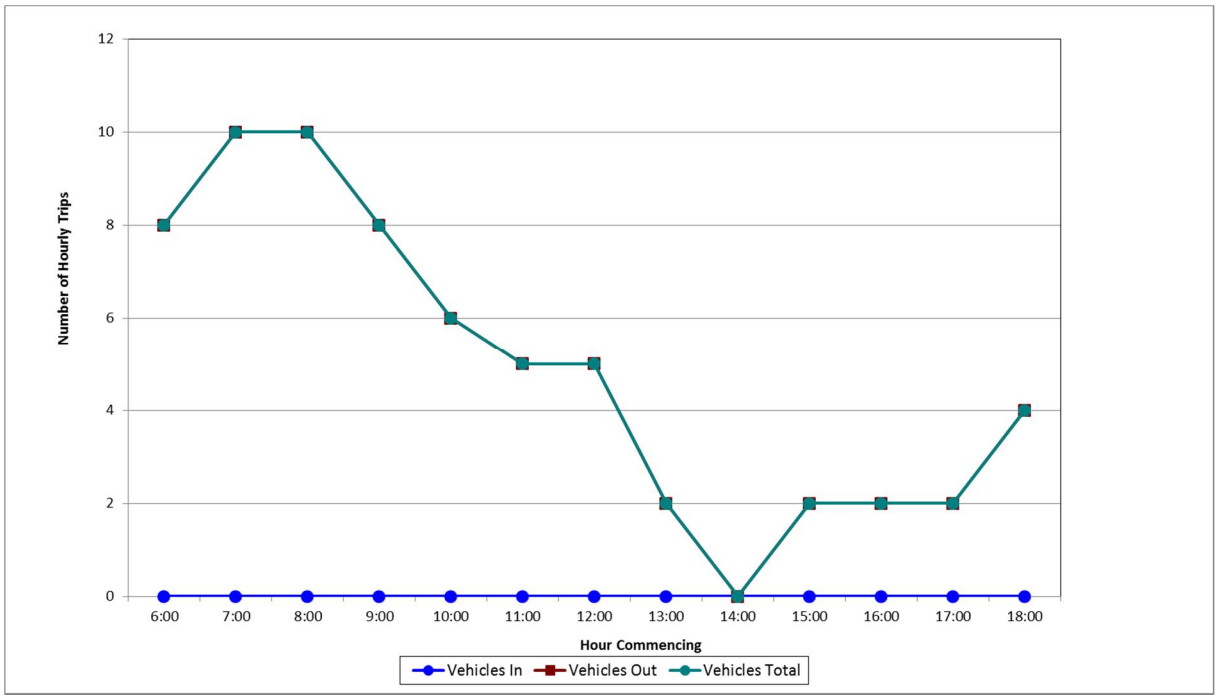


Figure 29 – Site 4 Person Trip Generation (Weekday North Access)

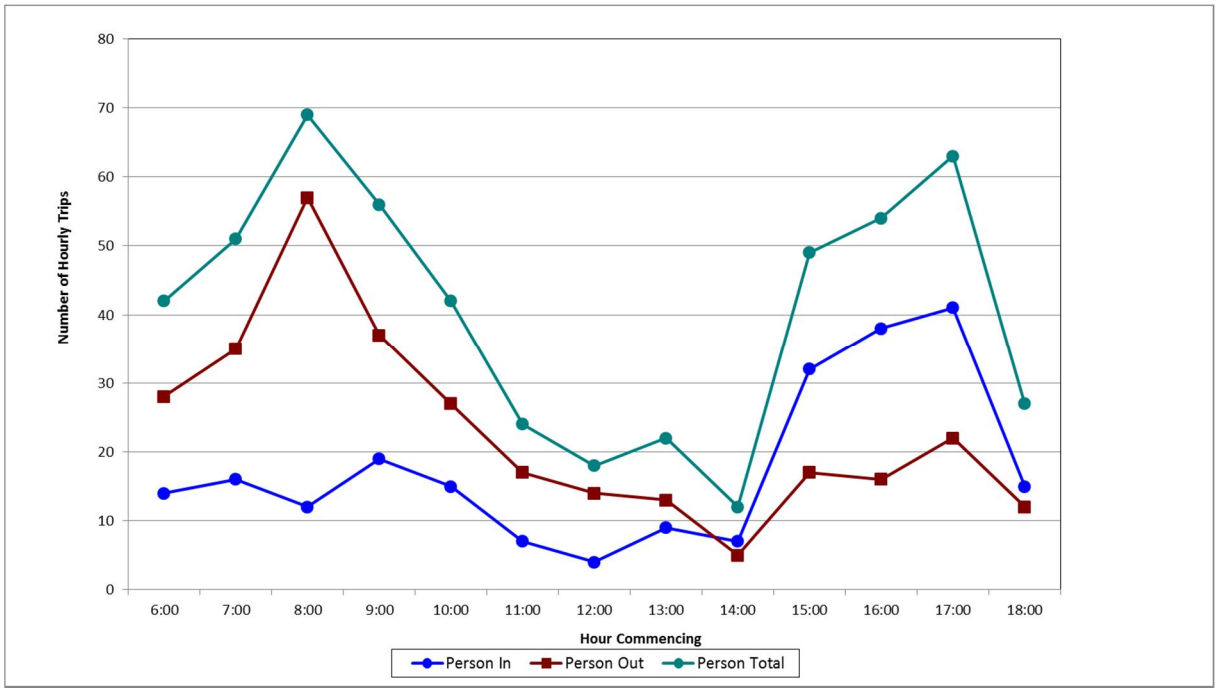


Table 29 - Site 4 Survey Results (Saturday Hourly, All Accesses)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	4	25	29	5	45	50	0	0	0	0	0	0	4	25	29	29	79	108	28
8:15 - 9:15	9	26	35	11	43	54	0	0	0	0	0	0	9	26	35	31	76	107	32
8:30 - 9:30	11	30	41	15	51	66	0	2	2	0	4	4	11	32	43	37	89	126	36
8:45 - 9:45	13	35	48	17	57	74	0	3	3	0	5	5	13	38	51	32	93	125	36
9:00 - 10:00	13	28	41	17	40	57	1	3	4	1	5	6	14	31	45	34	83	117	33
9:15 - 10:15	10	27	37	14	38	52	1	4	5	1	6	7	11	31	42	37	88	125	29
9:30 - 10:30	11	26	37	15	38	53	1	2	3	1	2	3	12	28	40	42	87	129	28
9:45 - 10:45	17	26	43	24	41	65	1	1	2	1	1	2	18	27	45	59	98	157	27
10:00 - 11:00	20	32	52	29	55	84	0	1	1	0	1	1	20	33	53	68	108	176	28
10:15 - 11:15	19	34	53	29	56	85	0	0	0	0	0	0	19	34	53	69	112	181	31
10:30 - 11:30	20	32	52	30	52	82	0	0	0	0	0	0	20	32	52	69	110	179	31
10:45 - 11:45	12	26	38	19	41	60	0	0	0	0	0	0	12	26	38	60	97	157	31
11:00 - 12:00	12	24	36	20	35	55	0	0	0	0	0	0	12	24	36	74	91	165	29
11:15 - 12:15	12	18	30	18	28	46	0	0	0	0	0	0	12	18	30	71	77	148	28
11:30 - 12:30	13	26	39	22	41	63	0	0	0	0	0	0	13	26	39	71	87	158	28
11:45 - 12:45	12	24	36	20	38	58	0	0	0	0	0	0	12	24	36	63	84	147	29
12:00 - 13:00	9	21	30	14	32	46	0	0	0	0	0	0	9	21	30	41	79	120	32
12:15 - 13:15	11	26	37	17	38	55	0	0	0	0	0	0	11	26	37	42	78	120	31
12:30 - 13:30	12	21	33	15	29	44	0	0	0	0	0	0	12	21	33	44	64	108	33
12:45 - 13:45	17	22	39	22	31	53	0	0	0	0	0	0	17	22	39	56	59	115	33
13:00 - 14:00	19	22	41	25	32	57	0	0	0	0	0	0	19	22	41	57	55	112	30
13:15 - 14:15	24	19	43	34	30	64	0	0	0	0	0	0	24	19	43	69	53	122	27
13:30 - 14:30	27	14	41	38	26	64	1	0	1	1	0	1	28	14	42	70	46	116	24
13:45 - 14:45	27	14	41	39	24	63	1	0	1	1	0	1	28	14	42	66	47	113	22
14:00 - 15:00	28	12	40	43	21	64	1	0	1	1	0	1	29	12	41	73	43	116	23
14:15 - 15:15	27	14	41	39	24	63	1	0	1	1	0	1	28	14	42	68	49	117	27
14:30 - 15:30	22	14	36	33	20	53	1	0	1	1	0	1	23	14	37	63	49	112	26
14:45 - 15:45	17	13	30	25	20	45	1	0	1	1	0	1	18	13	31	53	46	99	29
15:00 - 16:00	15	14	29	19	22	41	1	0	1	1	0	1	16	14	30	54	52	106	30
15:15 - 16:15	11	13	24	15	17	32	2	0	2	3	0	3	13	13	26	52	44	96	29
15:30 - 16:30	9	16	25	12	24	36	1	0	1	2	0	2	10	16	26	45	42	87	31
15:45 - 16:45	10	22	32	16	33	49	1	0	1	2	0	2	11	22	33	53	50	103	28
16:00 - 17:00	11	22	33	18	33	51	2	0	2	3	0	3	13	22	35	53	45	98	26
16:15 - 17:15	15	23	38	21	35	56	1	0	1	1	0	1	16	23	39	57	47	104	26
16:30 - 17:30	22	21	43	30	31	61	1	0	1	1	0	1	23	21	44	68	60	128	27
16:45 - 17:45	25	19	44	34	25	59	2	0	2	2	0	2	27	19	46	73	63	136	25
17:00 - 18:00	31	22	53	41	30	71	1	0	1	1	0	1	32	22	54	80	74	154	23
Peak	**31**	**35**	**53**	**43**	**57**	**85**	**2**	**4**	**5**	**3**	**6**	**7**	**32**	**38**	**54**	**80**	**112**	**181**	**36**

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 30 - Site 4 Vehicle Trip Generation (Saturday, South Access)

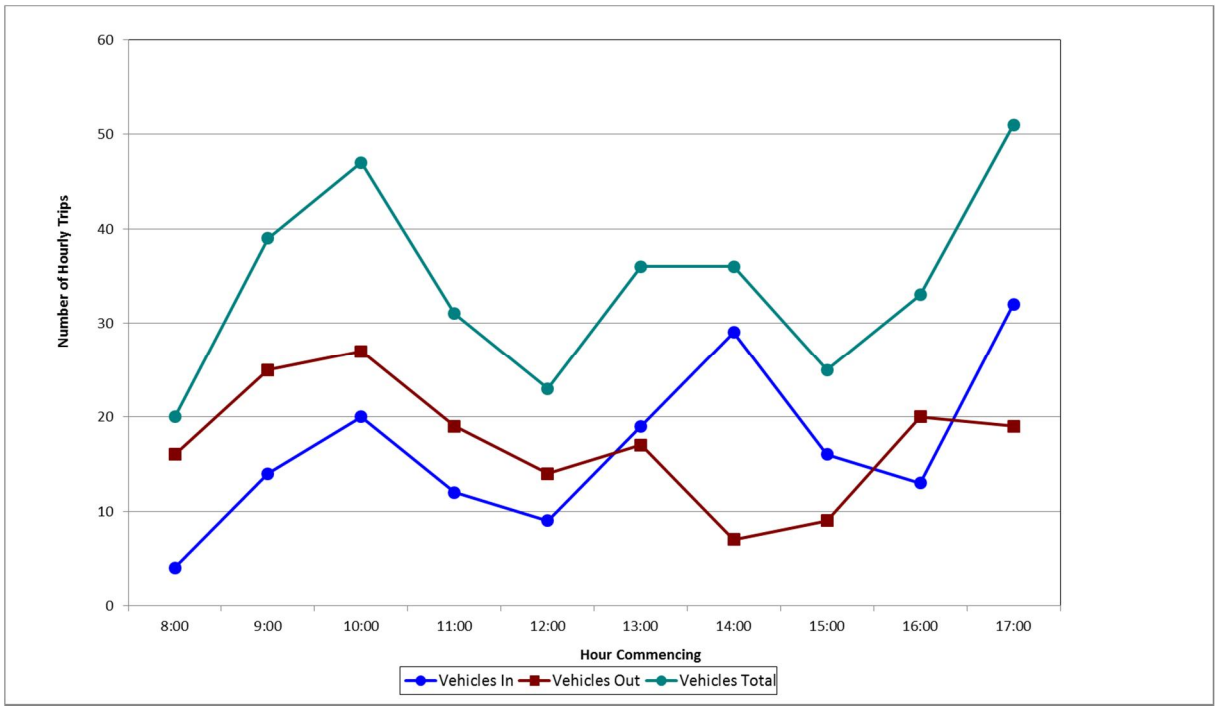


Figure 31 - Site 4 Person Trip Generation (Saturday, South Access)

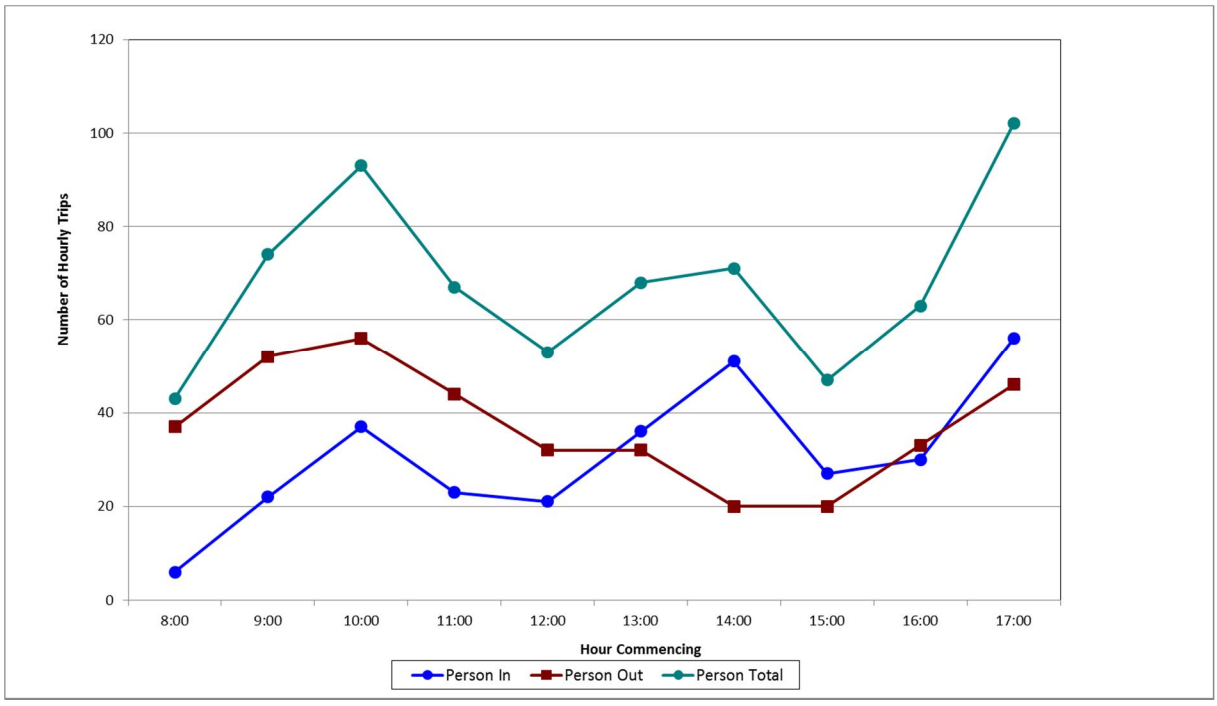


Figure 32 - Site 4 Vehicle Trip Generation (Saturday, North Access)

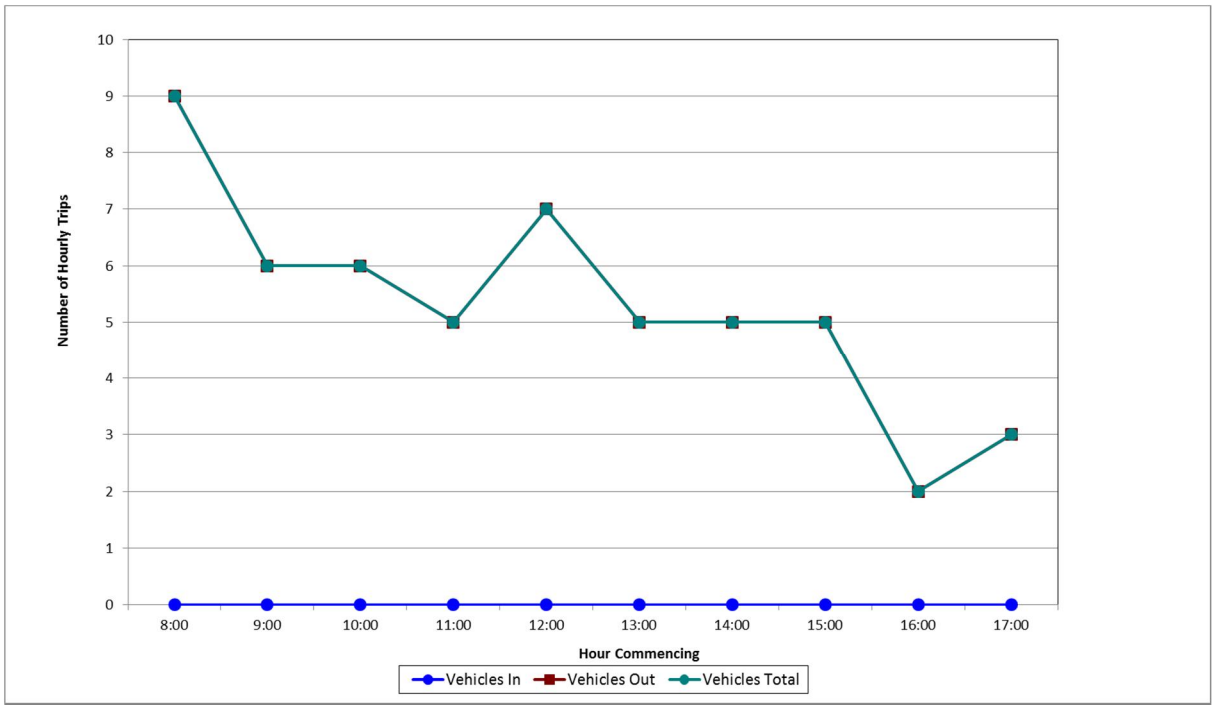
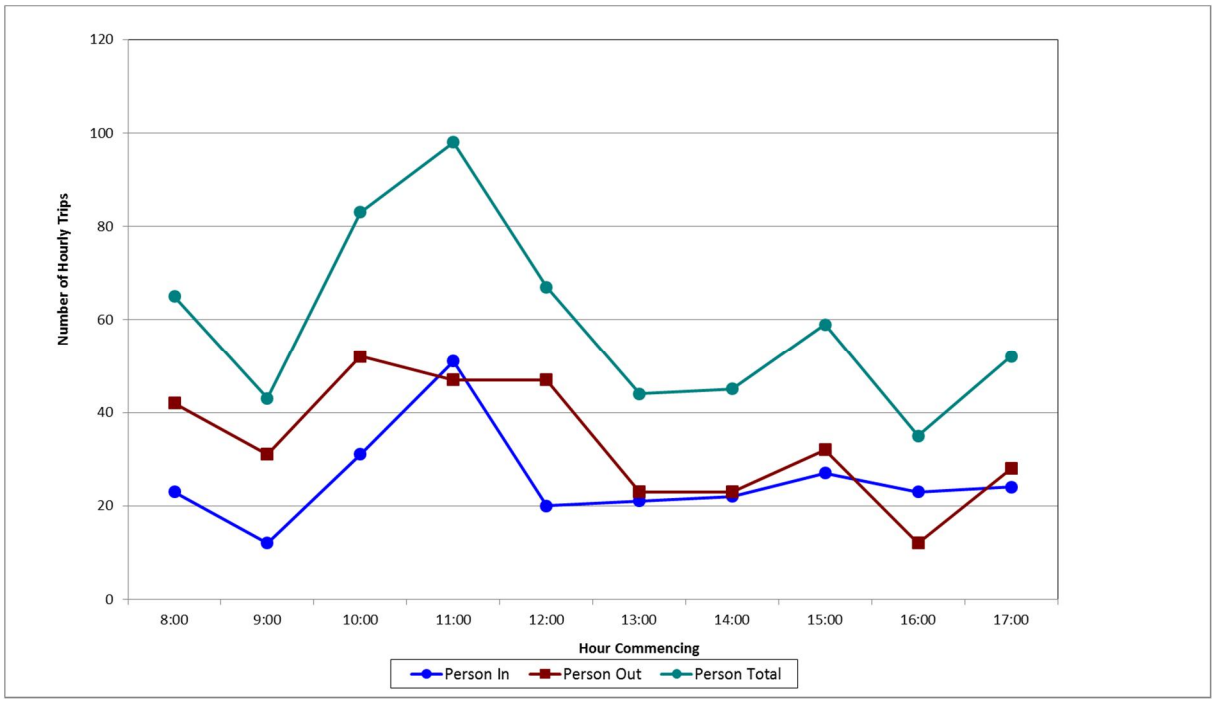


Figure 33 - Site 4 Person Trip Generation (Saturday, North Access)



3.1.5 Site 5: 26-30 Hassall, Street Parramatta

Table 30 - Site 5 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	3	8	11	3	9	12	1	0	1	1	0	1	4	8	12	7	23	30	0
6:15 - 7:15	4	8	12	4	9	13	1	0	1	1	0	1	5	8	13	8	31	39	0
6:30 - 7:30	4	8	12	4	9	13	1	0	1	1	0	1	5	8	13	6	33	39	0
6:45 - 7:45	5	10	15	5	11	16	1	0	1	1	0	1	6	10	16	7	42	49	0
7:00 - 8:00	4	8	12	4	10	14	0	0	0	0	0	0	4	8	12	6	48	54	0
7:15 - 8:15	3	10	13	3	12	15	0	0	0	0	0	0	3	10	13	7	50	57	0
7:30 - 8:30	5	12	17	5	15	20	0	0	0	0	0	0	5	12	17	11	63	74	0
7:45 - 8:45	5	12	17	5	17	22	0	0	0	0	0	0	5	12	17	11	67	78	0
8:00 - 9:00	6	15	21	6	22	28	0	1	1	0	1	1	6	16	22	10	69	79	0
8:15 - 9:15	6	11	17	6	17	23	0	1	1	0	1	1	6	12	18	8	58	66	0
8:30 - 9:30	4	10	14	4	16	20	0	1	1	0	1	1	4	11	15	4	45	49	0
8:45 - 9:45	5	10	15	5	14	19	1	2	3	1	2	3	6	12	18	8	35	43	0
9:00 - 10:00	5	6	11	5	7	12	1	1	2	1	1	2	6	7	13	8	19	27	0
9:15 - 10:15	4	6	10	4	7	11	1	1	2	1	1	2	5	7	12	8	16	24	0
9:30 - 10:30	3	3	6	3	3	6	2	1	3	2	1	3	5	4	9	8	11	19	0
9:45 - 10:45	1	2	3	1	2	3	1	1	2	1	1	2	2	3	5	4	10	14	0
10:00 - 11:00	0	2	2	0	3	3	1	1	2	1	1	2	1	3	4	8	12	20	0
10:15 - 11:15	0	3	3	0	4	4	1	1	2	1	1	2	1	4	5	8	13	21	0
10:30 - 11:30	0	3	3	0	4	4	0	1	1	0	1	1	0	4	4	8	13	21	0
10:45 - 11:45	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	12	11	23	0
11:00 - 12:00	0	2	2	0	2	2	0	1	1	0	1	1	0	3	3	9	10	19	0
11:15 - 12:15	1	1	2	1	1	2	0	1	1	0	1	1	1	2	3	9	9	18	0
11:30 - 12:30	1	1	2	1	1	2	0	1	1	0	1	1	1	2	3	8	9	17	0
11:45 - 12:45	2	1	3	2	2	4	0	1	1	0	1	1	2	2	4	5	8	13	0
12:00 - 13:00	3	3	6	3	5	8	0	0	0	0	0	0	3	3	6	5	9	14	0
12:15 - 13:15	2	4	6	2	6	8	0	0	0	0	0	0	2	4	6	7	13	20	0
12:30 - 13:30	2	4	6	2	6	8	0	0	0	0	0	0	2	4	6	11	17	28	0
12:45 - 13:45	2	4	6	2	5	7	0	0	0	0	0	0	2	4	6	13	16	29	0
13:00 - 14:00	2	3	5	2	3	5	1	0	1	1	0	1	3	3	6	15	14	29	0
13:15 - 14:15	2	4	6	2	4	6	1	0	1	1	0	1	3	4	7	16	13	29	0
13:30 - 14:30	2	6	8	2	6	8	1	0	1	1	0	1	3	6	9	18	14	32	0
13:45 - 14:45	1	6	7	1	6	7	1	0	1	1	0	1	2	6	8	17	17	34	0
14:00 - 15:00	3	5	8	3	5	8	0	0	0	0	0	0	3	5	8	17	15	32	0
14:15 - 15:15	3	3	6	3	3	6	0	0	0	0	0	0	3	3	6	25	14	39	0
14:30 - 15:30	4	4	8	4	5	9	0	0	0	0	0	0	4	4	8	22	13	35	0
14:45 - 15:45	7	6	13	8	8	16	0	0	0	0	0	0	7	6	13	28	16	44	0
15:00 - 16:00	4	7	11	5	9	14	0	0	0	0	0	0	4	7	11	30	19	49	0
15:15 - 16:15	7	7	14	9	9	18	0	0	0	0	0	0	7	7	14	25	18	43	0
15:30 - 16:30	7	5	12	9	6	15	0	0	0	0	0	0	7	5	12	27	15	42	0
15:45 - 16:45	5	4	9	6	5	11	0	0	0	0	0	0	5	4	9	23	17	40	0
16:00 - 17:00	6	4	10	9	5	14	0	0	0	0	0	0	6	4	10	30	22	52	0
16:15 - 17:15	4	5	9	6	6	12	0	0	0	0	0	0	4	5	9	31	25	56	0
16:30 - 17:30	6	5	11	10	6	16	0	0	0	0	0	0	6	5	11	33	27	60	0
16:45 - 17:45	5	5	10	9	8	17	0	0	0	0	0	0	5	5	10	36	24	60	0
17:00 - 18:00	6	4	10	8	7	15	0	0	0	0	0	0	6	4	10	31	23	54	0
17:15 - 18:15	9	7	16	11	11	22	0	0	0	0	0	0	9	7	16	39	25	64	0
17:30 - 18:30	11	7	18	12	11	23	0	0	0	0	0	0	11	7	18	48	33	81	0
17:45 - 18:45	15	6	21	22	8	30	0	0	0	0	0	0	15	6	21	68	35	103	0
18:00 - 19:00	16	6	22	26	8	34	0	0	0	0	0	0	16	6	22	75	29	104	0
Peak	**16**	**15**	**22**	**26**	**22**	**34**	**2**	**2**	**3**	**2**	**2**	**3**	**16**	**16**	**22**	**75**	**69**	**104**	**0**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 34 - Site 5 Vehicle Trip Generation (Weekday)

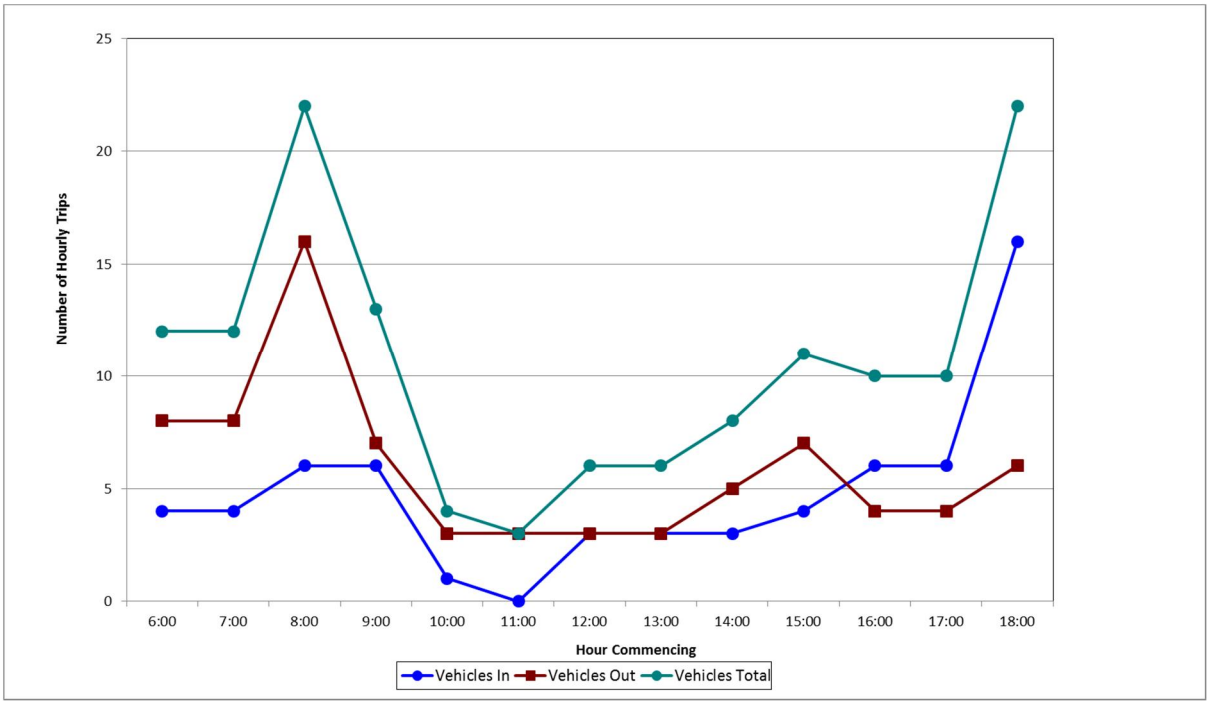


Figure 35 - Site 5 Person Trip Generation (Weekday)

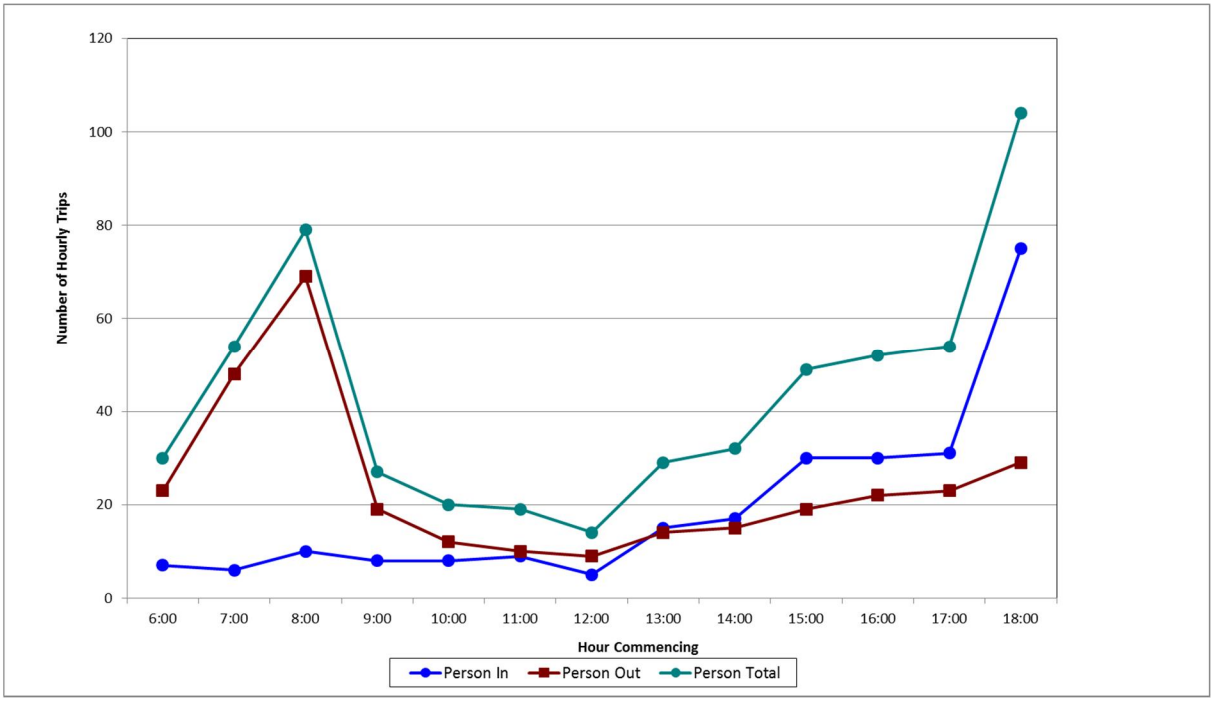


Table 31- Site 5 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	2	12	14	3	21	24	0	0	0	0	0	0	2	12	14	7	43	50	0
8:15 - 9:15	2	10	12	4	21	25	0	0	0	0	0	0	2	10	12	5	41	46	0
8:30 - 9:30	3	11	14	6	21	27	0	0	0	0	0	0	3	11	14	10	35	45	0
8:45 - 9:45	4	13	17	7	22	29	0	0	0	0	0	0	4	13	17	18	44	62	0
9:00 - 10:00	8	8	16	11	13	24	0	0	0	0	0	0	8	8	16	30	35	65	0
9:15 - 10:15	7	9	16	8	14	22	1	0	1	2	0	2	8	9	17	31	38	69	0
9:30 - 10:30	6	11	17	6	18	24	1	0	1	2	0	2	7	11	18	25	45	70	0
9:45 - 10:45	5	10	15	5	17	22	1	0	1	2	0	2	6	10	16	18	38	56	0
10:00 - 11:00	2	9	11	3	15	18	1	0	1	2	0	2	3	9	12	12	37	49	0
10:15 - 11:15	5	7	12	5	11	16	0	1	1	0	2	2	5	8	13	12	34	46	0
10:30 - 11:30	6	5	11	6	8	14	0	1	1	0	2	2	6	6	12	17	33	50	0
10:45 - 11:45	8	5	13	10	8	18	0	1	1	0	2	2	8	6	14	20	35	55	0
11:00 - 12:00	6	6	12	7	12	19	0	1	1	0	2	2	6	7	13	14	39	53	0
11:15 - 12:15	5	8	13	8	15	23	0	0	0	0	0	0	5	8	13	15	44	59	0
11:30 - 12:30	6	6	12	10	12	22	0	0	0	0	0	0	6	6	12	15	38	53	0
11:45 - 12:45	5	4	9	7	9	16	0	0	0	0	0	0	5	4	9	22	31	53	0
12:00 - 13:00	8	3	11	12	5	17	0	0	0	0	0	0	8	3	11	31	23	54	0
12:15 - 13:15	9	3	12	12	5	17	0	0	0	0	0	0	9	3	12	31	17	48	0
12:30 - 13:30	8	5	13	10	8	18	0	0	0	0	0	0	8	5	13	34	17	51	0
12:45 - 13:45	8	7	15	10	9	19	0	0	0	0	0	0	8	7	15	25	16	41	0
13:00 - 14:00	6	7	13	7	9	16	0	0	0	0	0	0	6	7	13	23	18	41	0
13:15 - 14:15	4	6	10	6	7	13	0	0	0	0	0	0	4	6	10	26	17	43	0
13:30 - 14:30	3	6	9	5	7	12	0	0	0	0	0	0	3	6	9	20	18	38	0
13:45 - 14:45	2	4	6	4	6	10	0	0	0	0	0	0	2	4	6	21	20	41	0
14:00 - 15:00	3	5	8	4	7	11	0	0	0	0	0	0	3	5	8	18	19	37	0
14:15 - 15:15	4	5	9	4	9	13	0	0	0	0	0	0	4	5	9	14	20	34	0
14:30 - 15:30	5	5	10	5	8	13	0	0	0	0	0	0	5	5	10	18	17	35	0
14:45 - 15:45	5	5	10	5	7	12	0	0	0	0	0	0	5	5	10	18	20	38	0
15:00 - 16:00	4	4	8	4	6	10	0	0	0	0	0	0	4	4	8	25	19	44	0
15:15 - 16:15	3	4	7	4	6	10	0	0	0	0	0	0	3	4	7	26	20	46	0
15:30 - 16:30	3	3	6	5	6	11	0	0	0	0	0	0	3	3	6	26	22	48	0
15:45 - 16:45	5	2	7	9	5	14	0	0	0	0	0	0	5	2	7	28	14	42	0
16:00 - 17:00	6	3	9	11	6	17	0	0	0	0	0	0	6	3	9	20	14	34	0
16:15 - 17:15	7	4	11	11	6	17	0	0	0	0	0	0	7	4	11	19	13	32	0
16:30 - 17:30	8	3	11	14	4	18	0	0	0	0	0	0	8	3	11	22	10	32	0
16:45 - 17:45	6	4	10	10	5	15	0	0	0	0	0	0	6	4	10	23	23	46	0
17:00 - 18:00	6	5	11	12	9	21	0	0	0	0	0	0	6	5	11	30	30	60	0
Peak	**9**	**13**	**17**	**14**	**22**	**29**	**1**	**1**	**1**	**2**	**2**	**2**	**9**	**13**	**18**	**34**	**45**	**70**	**0**

Figure 36 - Site 5 Vehicle Trip Generation (Saturday)

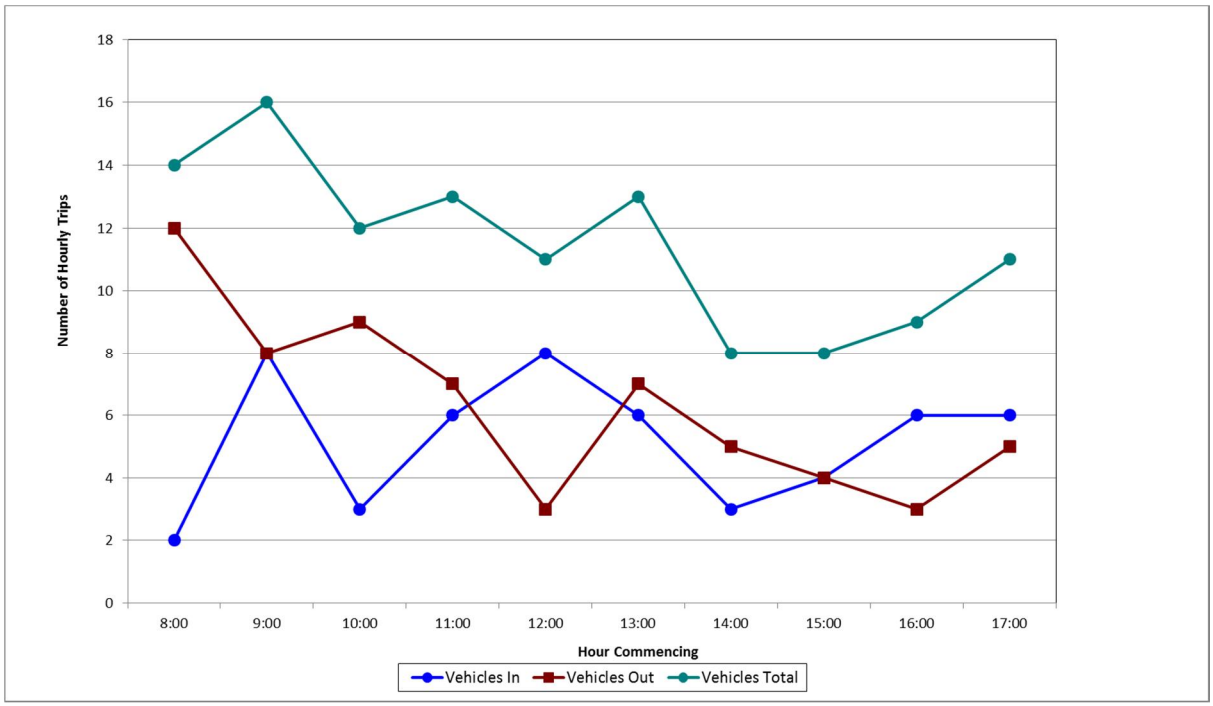
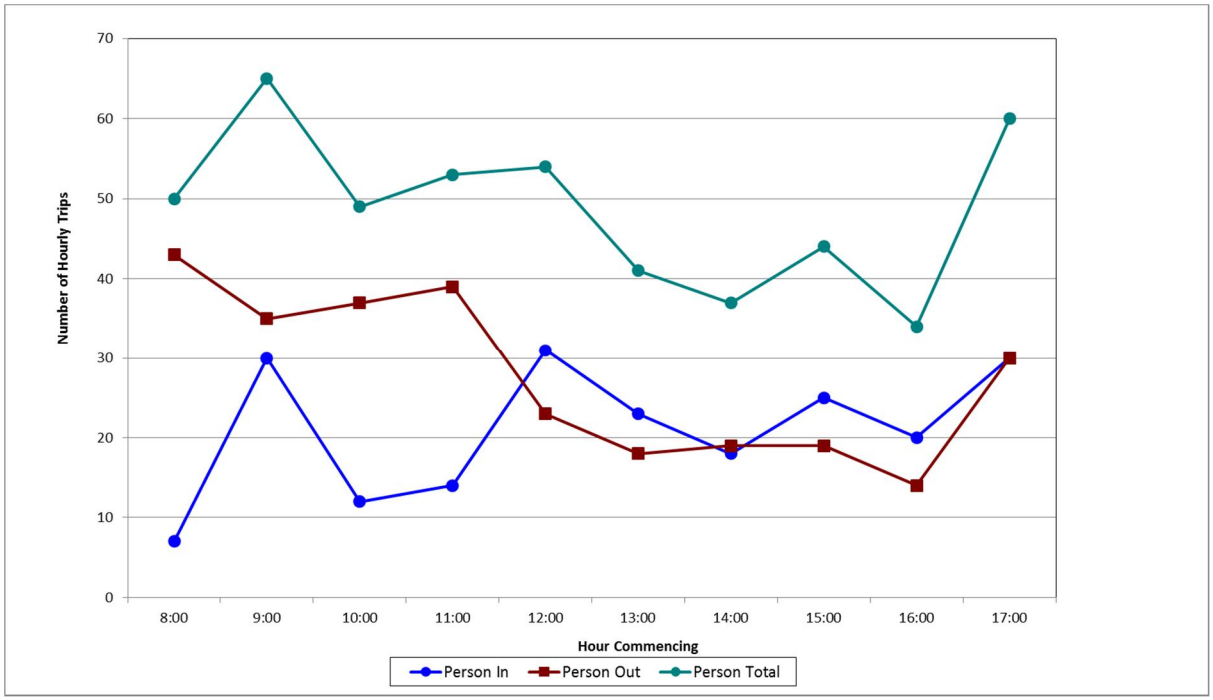


Figure 37 - Site 5 Person Trip Generation (Saturday)



3.1.6 Site 6: 10 Wentworth Drive, Liberty Grove

Table 32 - Site 6 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	1	15	16	1	19	20	0	0	0	0	0	0	1	15	16	2	27	29	0
6:15 - 7:15	1	14	15	1	18	19	0	0	0	0	0	0	1	14	15	2	27	29	0
6:30 - 7:30	1	24	25	1	31	32	0	0	0	0	0	0	1	24	25	2	41	43	0
6:45 - 7:45	2	35	37	2	42	44	0	0	0	0	0	0	2	35	37	3	56	59	0
7:00 - 8:00	1	37	38	1	47	48	0	0	0	0	0	0	1	37	38	2	64	66	0
7:15 - 8:15	2	35	37	2	47	49	0	0	0	0	0	0	2	35	37	2	66	68	0
7:30 - 8:30	7	28	35	7	36	43	0	0	0	0	0	0	7	28	35	7	66	73	0
7:45 - 8:45	6	18	24	6	24	30	0	0	0	0	0	0	6	18	24	6	49	55	0
8:00 - 9:00	6	12	18	6	14	20	0	0	0	0	0	0	6	12	18	6	40	46	0
8:15 - 9:15	5	14	19	5	15	20	0	0	0	0	0	0	5	14	19	7	47	54	0
8:30 - 9:30	0	12	12	0	16	16	0	0	0	0	0	0	0	12	12	2	38	40	0
8:45 - 9:45	4	11	15	5	15	20	0	0	0	0	0	0	4	11	15	7	34	41	0
9:00 - 10:00	5	10	15	6	14	20	0	0	0	0	0	0	5	10	15	10	28	38	0
9:15 - 10:15	6	8	14	7	12	19	0	0	0	0	0	0	6	8	14	9	16	25	0
9:30 - 10:30	9	6	15	13	7	20	0	0	0	0	0	0	9	6	15	17	12	29	0
9:45 - 10:45	5	4	9	8	5	13	0	0	0	0	0	0	5	4	9	15	9	24	0
10:00 - 11:00	6	3	9	10	4	14	0	0	0	0	0	0	6	3	9	15	8	23	0
10:15 - 11:15	7	2	9	11	12	23	0	0	0	0	0	0	7	2	9	17	23	40	0
10:30 - 11:30	4	2	6	5	12	17	0	0	0	0	0	0	4	2	6	9	20	29	0
10:45 - 11:45	6	3	9	7	13	20	0	0	0	0	0	0	6	3	9	8	24	32	0
11:00 - 12:00	6	5	11	7	16	23	0	0	0	0	0	0	6	5	11	13	26	39	0
11:15 - 12:15	4	4	8	5	5	10	0	0	0	0	0	0	4	4	8	13	9	22	0
11:30 - 12:30	5	4	9	6	5	11	0	0	0	0	0	0	5	4	9	15	10	25	0
11:45 - 12:45	4	4	8	5	5	10	0	0	0	0	0	0	4	4	8	17	7	24	0
12:00 - 13:00	5	4	9	7	4	11	0	0	0	0	0	0	5	4	9	15	6	21	0
12:15 - 13:15	5	3	8	7	3	10	0	0	0	0	0	0	5	3	8	12	7	19	0
12:30 - 13:30	4	6	10	6	5	11	0	0	0	0	0	0	4	6	10	10	8	18	0
12:45 - 13:45	5	7	12	8	6	14	0	0	0	0	0	0	5	7	12	9	9	18	0
13:00 - 14:00	2	5	7	3	4	7	0	0	0	0	0	0	2	5	7	3	7	10	0
13:15 - 14:15	4	5	9	7	4	11	0	0	0	0	0	0	4	5	9	7	4	11	0
13:30 - 14:30	5	3	8	9	4	13	0	0	0	0	0	0	5	3	8	10	4	14	0
13:45 - 14:45	4	1	5	7	2	9	0	0	0	0	0	0	4	1	5	8	2	10	0
14:00 - 15:00	5	3	8	9	4	13	0	0	0	0	0	0	5	3	8	10	4	14	0
14:15 - 15:15	6	6	12	9	9	18	0	0	0	0	0	0	6	6	12	14	9	23	0
14:30 - 15:30	6	6	12	8	8	16	0	0	0	0	0	0	6	6	12	13	11	24	0
14:45 - 15:45	8	9	17	12	12	24	0	0	0	0	0	0	8	9	17	22	16	38	0
15:00 - 16:00	11	7	18	17	10	27	0	0	0	0	0	0	11	7	18	34	15	49	0
15:15 - 16:15	8	4	12	13	5	18	0	0	0	0	0	0	8	4	12	32	13	45	0
15:30 - 16:30	9	5	14	15	9	24	0	0	0	0	0	0	9	5	14	35	22	57	0
15:45 - 16:45	10	4	14	15	9	24	0	0	0	0	0	0	10	4	14	35	22	57	0
16:00 - 17:00	9	5	14	14	10	24	0	0	0	0	0	0	9	5	14	29	23	52	0
16:15 - 17:15	10	7	17	15	13	28	0	0	0	0	0	0	10	7	17	33	31	64	0
16:30 - 17:30	11	8	19	17	15	32	0	0	0	0	0	0	11	8	19	46	27	73	0
16:45 - 17:45	7	7	14	12	12	24	0	0	0	0	0	0	7	7	14	41	24	65	0
17:00 - 18:00	5	7	12	7	13	20	0	0	0	0	0	0	5	7	12	34	26	60	0
17:15 - 18:15	9	6	15	13	12	25	0	0	0	0	0	0	9	6	15	36	20	56	0
17:30 - 18:30	14	5	19	17	9	26	0	0	0	0	0	0	14	5	19	33	17	50	0
17:45 - 18:45	16	7	23	20	14	34	0	0	0	0	0	0	16	7	23	33	24	57	0
18:00 - 19:00	18	8	26	23	14	37	0	0	0	0	0	0	18	8	26	36	22	58	0
Peak	**18**	**37**	**38**	**23**	**47**	**49**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**37**	**38**	**46**	**66**	**73**	**0**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 38 - Site 6 Vehicle Trip Generation (Weekday)

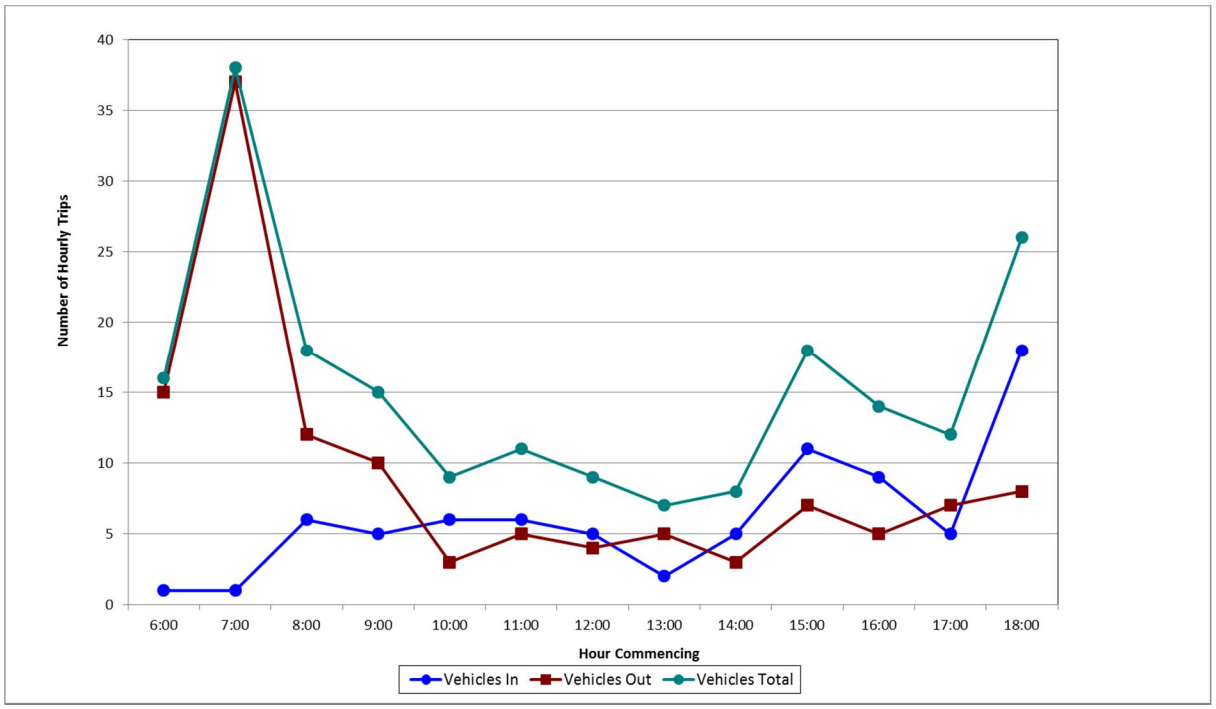


Figure 39 - Site 6 Person Trip Generation (Weekday)

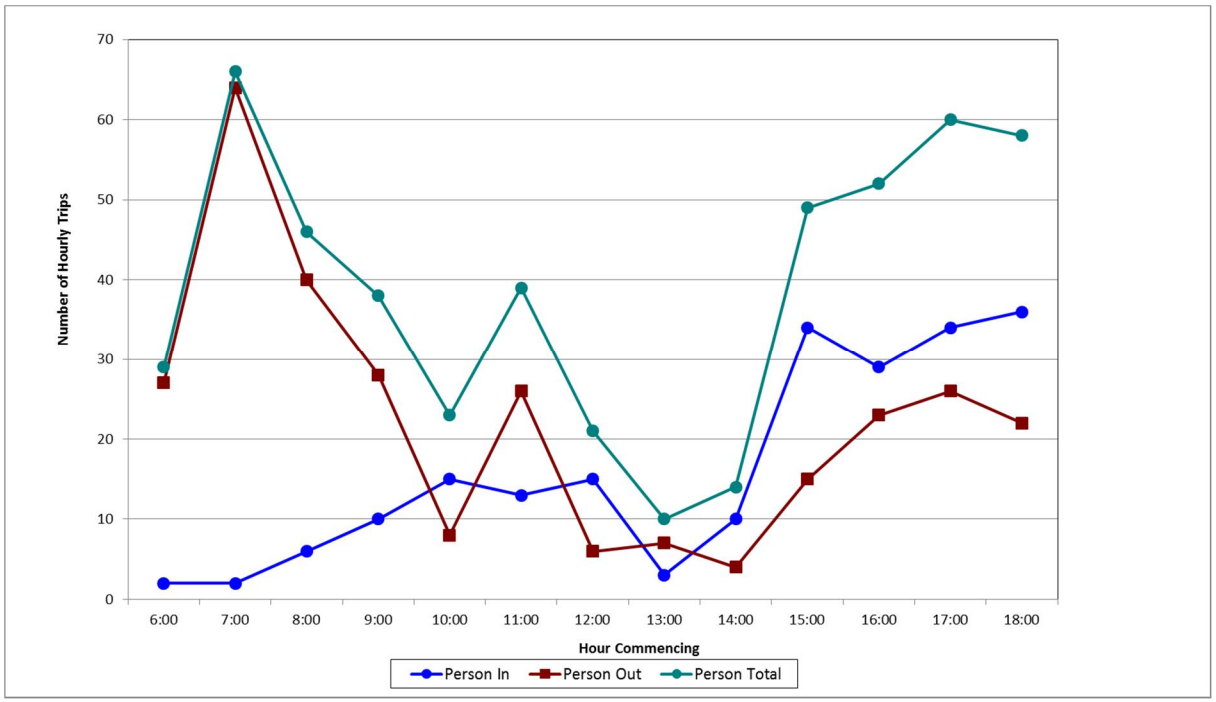


Table 33 - Site 6 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	1	7	8	1	11	12	0	0	0	0	0	0	1	7	8	6	21	27	0
8:15 - 9:15	0	8	8	0	14	14	0	0	0	0	0	0	0	8	8	8	24	32	0
8:30 - 9:30	1	11	12	2	26	28	0	0	0	0	0	0	1	11	12	15	37	52	0
8:45 - 9:45	2	8	10	4	22	26	0	0	0	0	0	0	2	8	10	17	36	53	0
9:00 - 10:00	3	8	11	5	24	29	0	0	0	0	0	0	3	8	11	16	38	54	0
9:15 - 10:15	3	9	12	5	23	28	0	0	0	0	0	0	3	9	12	12	33	45	0
9:30 - 10:30	3	5	8	6	9	15	0	0	0	0	0	0	3	5	8	8	18	26	0
9:45 - 10:45	3	10	13	7	21	28	0	0	0	0	0	0	3	10	13	10	26	36	0
10:00 - 11:00	3	10	13	7	18	25	0	0	0	0	0	0	3	10	13	10	24	34	0
10:15 - 11:15	5	9	14	13	17	30	0	0	0	0	0	0	5	9	14	16	24	40	0
10:30 - 11:30	5	12	17	11	25	36	0	0	0	0	0	0	5	12	17	24	40	64	0
10:45 - 11:45	4	11	15	8	24	32	0	0	0	0	0	0	4	11	15	20	38	58	0
11:00 - 12:00	5	10	15	10	23	33	0	0	0	0	0	0	5	10	15	21	41	62	0
11:15 - 12:15	4	8	12	6	24	30	0	0	0	0	0	0	4	8	12	18	46	64	0
11:30 - 12:30	6	11	17	13	26	39	0	0	0	0	0	0	6	11	17	15	41	56	0
11:45 - 12:45	7	8	15	16	17	33	0	0	0	0	0	0	7	8	15	18	33	51	0
12:00 - 13:00	7	12	19	16	24	40	0	0	0	0	0	0	7	12	19	19	34	53	0
12:15 - 13:15	6	12	18	14	20	34	0	0	0	0	0	0	6	12	18	16	25	41	0
12:30 - 13:30	3	8	11	6	12	18	0	0	0	0	0	0	3	8	11	9	15	24	0
12:45 - 13:45	4	8	12	7	11	18	0	0	0	0	0	0	4	8	12	10	14	24	0
13:00 - 14:00	3	5	8	8	5	13	0	0	0	0	0	0	3	5	8	9	8	17	0
13:15 - 14:15	5	5	10	9	10	19	0	0	0	0	0	0	5	5	10	11	15	26	0
13:30 - 14:30	7	6	13	13	16	29	0	0	0	0	0	0	7	6	13	15	21	36	0
13:45 - 14:45	7	8	15	13	15	28	0	0	0	0	0	0	7	8	15	15	18	33	0
14:00 - 15:00	8	7	15	12	17	29	0	0	0	0	0	0	8	7	15	15	19	34	0
14:15 - 15:15	6	6	12	11	11	22	0	0	0	0	0	0	6	6	12	15	15	30	0
14:30 - 15:30	7	5	12	13	6	19	0	0	0	0	0	0	7	5	12	17	13	30	0
14:45 - 15:45	7	3	10	14	7	21	0	0	0	0	0	0	7	3	10	18	20	38	0
15:00 - 16:00	8	6	14	15	13	28	0	0	0	0	0	0	8	6	14	20	30	50	0
15:15 - 16:15	13	7	20	24	15	39	0	0	0	0	0	0	13	7	20	28	31	59	0
15:30 - 16:30	12	6	18	20	13	33	0	0	0	0	0	0	12	6	18	25	28	53	0
15:45 - 16:45	12	7	19	18	17	35	0	0	0	0	0	0	12	7	19	30	29	59	0
16:00 - 17:00	10	6	16	15	11	26	0	0	0	0	0	0	10	6	16	31	23	54	0
16:15 - 17:15	6	6	12	8	11	19	0	0	0	0	0	0	6	6	12	29	21	50	0
16:30 - 17:30	6	5	11	10	10	20	0	0	0	0	0	0	6	5	11	34	19	53	0
16:45 - 17:45	6	4	10	9	7	16	0	0	0	0	0	0	6	4	10	33	16	49	0
17:00 - 18:00	6	4	10	9	8	17	0	0	0	0	0	0	6	4	10	29	13	42	0
Peak	**13**	**12**	**20**	**24**	**26**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**12**	**20**	**34**	**46**	**64**	**0**

Figure 40 - Site 6 Vehicle Trip Generation (Saturday)

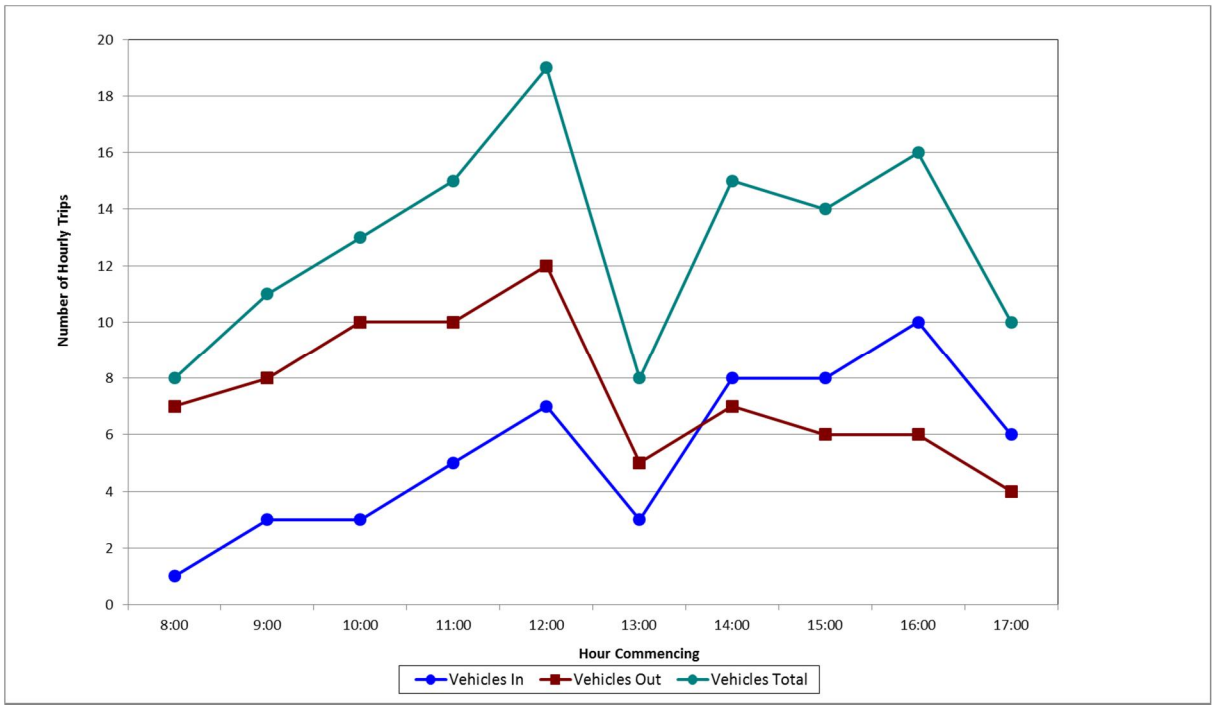
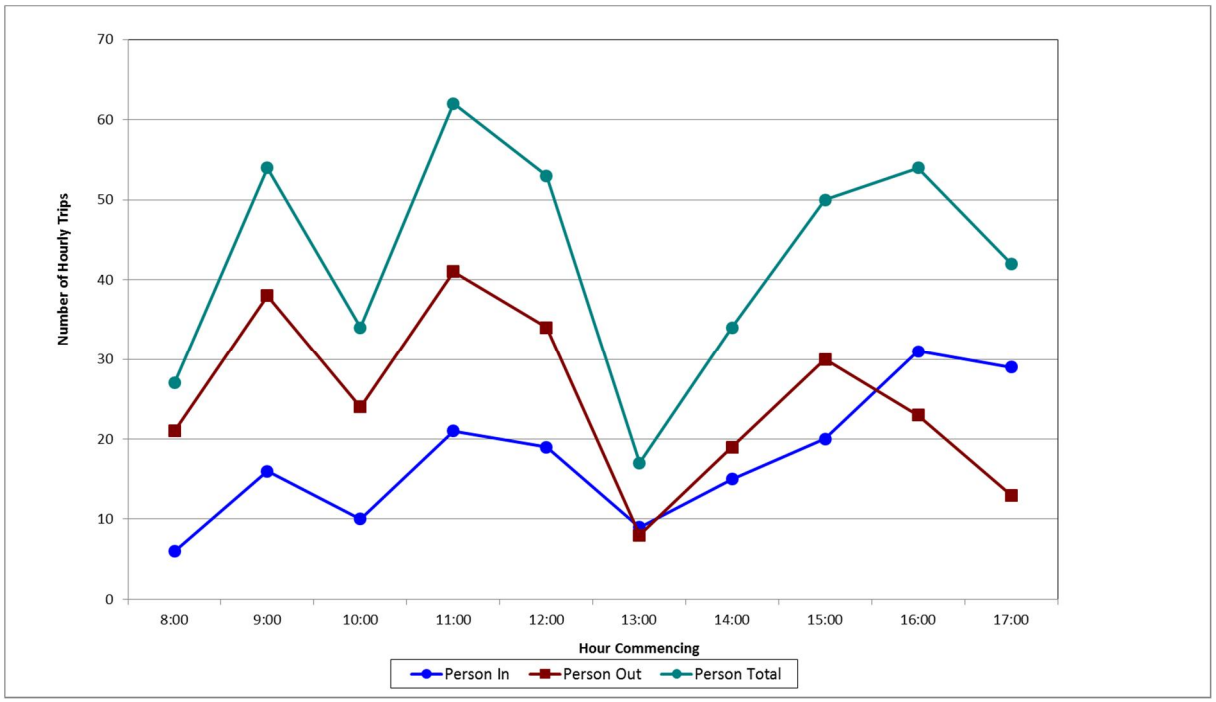


Figure 41 – Site 6 Person Trip Generation (Saturday)



3.1.7 Site 7: 2 Everton Road, Strathfield

Table 34 - Site 7 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	1	3	4	1	3	4	0	1	1	0	1	1	1	4	5	1	14	15	0
6:15 - 7:15	1	1	2	1	1	2	0	1	1	0	1	1	1	2	3	2	8	10	0
6:30 - 7:30	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	5	6	0
6:45 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	0
7:00 - 8:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	6	7	0
7:15 - 8:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	8	8	0
7:30 - 8:30	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	1	10	11	1
7:45 - 8:45	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	3	13	16	1
8:00 - 9:00	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	3	13	16	1
8:15 - 9:15	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	3	13	16	1
8:30 - 9:30	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	4	10	14	0
8:45 - 9:45	0	4	4	0	5	5	0	0	0	0	0	0	0	4	4	2	11	13	0
9:00 - 10:00	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	3	10	13	0
9:15 - 10:15	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	6	12	18	0
9:30 - 10:30	1	2	3	1	3	4	0	0	0	0	0	0	1	2	3	5	15	20	0
9:45 - 10:45	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	5	12	17	0
10:00 - 11:00	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	4	10	14	0
10:15 - 11:15	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	1	7	8	0
10:30 - 11:30	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	1	5	6	0
10:45 - 11:45	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	1	5	6	0
11:00 - 12:00	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	2	6	8	0
11:15 - 12:15	0	2	2	0	3	3	0	0	0	0	0	0	0	2	2	3	5	8	0
11:30 - 12:30	3	1	4	3	1	4	0	0	0	0	0	0	3	1	4	7	4	11	0
11:45 - 12:45	3	0	3	3	1	4	0	0	0	0	0	0	3	0	3	8	4	12	0
12:00 - 13:00	4	0	4	4	2	6	0	0	0	0	0	0	4	0	4	9	5	14	0
12:15 - 13:15	5	0	5	5	2	7	0	0	0	0	0	0	5	0	5	10	5	15	0
12:30 - 13:30	2	0	2	2	2	4	0	0	0	0	0	0	2	0	2	6	4	10	0
12:45 - 13:45	2	0	2	2	1	3	0	0	0	0	0	0	2	0	2	5	2	7	0
13:00 - 14:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	3	0	3	0
13:15 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0
13:30 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0
13:45 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	0
14:00 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	9	0
14:15 - 15:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	6	6	12	0
14:30 - 15:30	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	8	7	15	0
14:45 - 15:45	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	9	8	17	0
15:00 - 16:00	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	13	6	19	0
15:15 - 16:15	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	13	5	18	0
15:30 - 16:30	2	3	5	2	3	5	0	0	0	0	0	0	2	3	5	11	5	16	0
15:45 - 16:45	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	18	4	22	0
16:00 - 17:00	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	16	5	21	0
16:15 - 17:15	2	3	5	2	3	5	0	0	0	0	0	0	2	3	5	16	7	23	0
16:30 - 17:30	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	14	6	20	0
16:45 - 17:45	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	8	4	12	0
17:00 - 18:00	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	10	3	13	0
17:15 - 18:15	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	10	2	12	0
17:30 - 18:30	3	0	3	3	0	3	0	0	0	0	0	0	3	0	3	14	6	20	0
17:45 - 18:45	4	0	4	4	0	4	0	0	0	0	0	0	4	0	4	18	6	24	0
18:00 - 19:00	5	0	5	5	0	5	0	0	0	0	0	0	5	0	5	18	10	28	1
Peak	**5**	**4**	**5**	**5**	**5**	**7**	**0**	**1**	**1**	**0**	**1**	**1**	**5**	**4**	**5**	**18**	**15**	**28**	**1**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 42 - Site 7 Vehicle Trip Generation (Weekday)

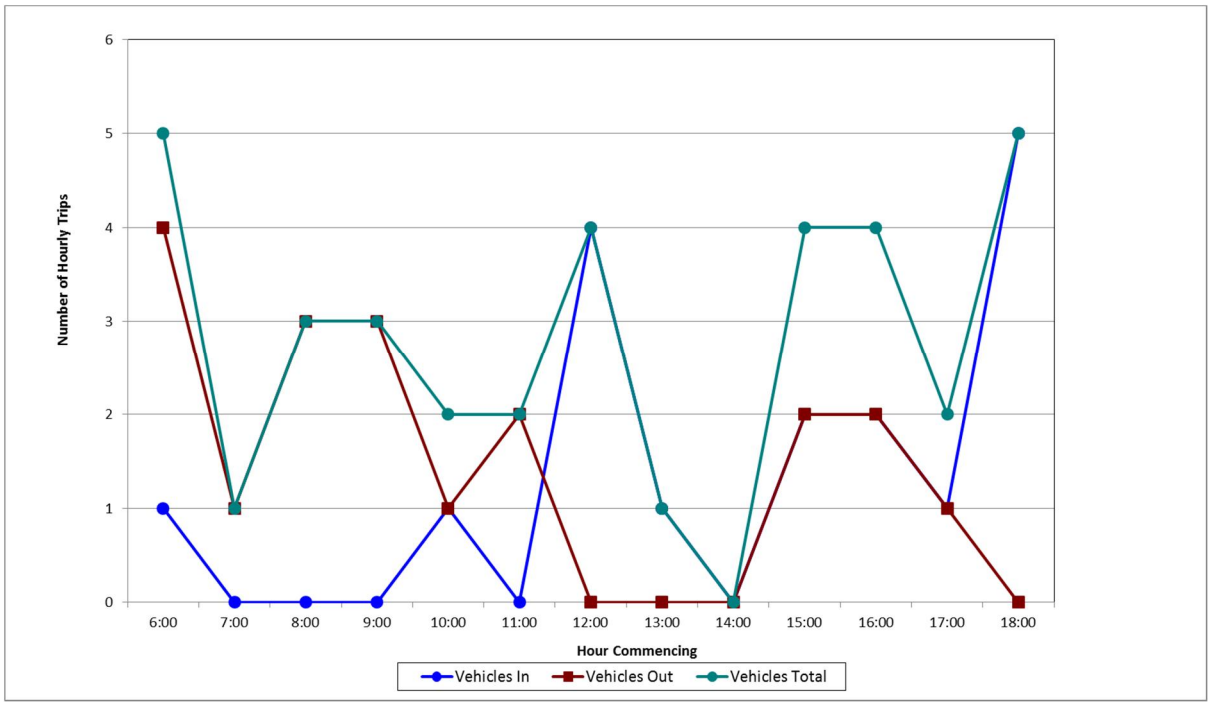


Figure 43 - Site 7 Person Trip Generation (Weekday)

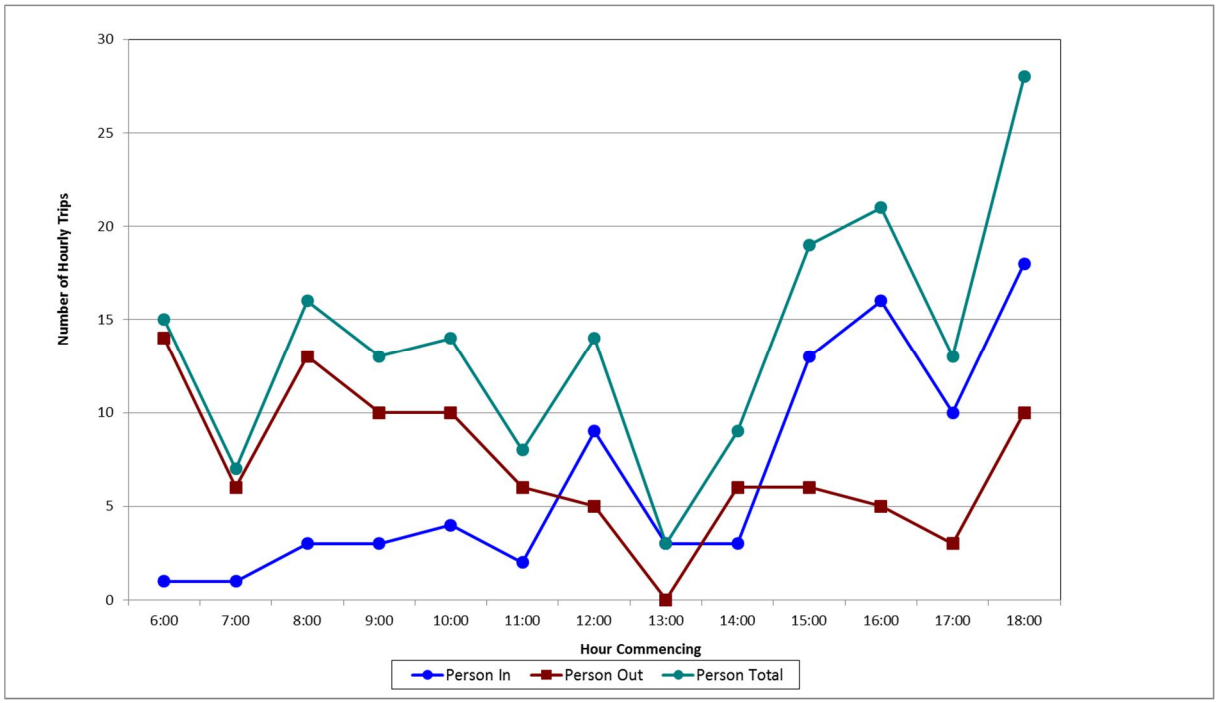


Table 35 - Site 7 Survey Results (Weekend Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	1	5	6	1	6	7	0	0	0	0	0	0	1	5	6	13	16	29	1
8:15 - 9:15	0	3	3	0	4	4	0	0	0	0	0	0	0	3	3	5	11	16	0
8:30 - 9:30	0	4	4	0	5	5	0	0	0	0	0	0	0	4	4	5	11	16	0
8:45 - 9:45	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	6	10	16	0
9:00 - 10:00	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	8	11	19	0
9:15 - 10:15	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	8	8	16	0
9:30 - 10:30	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	6	10	16	0
9:45 - 10:45	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	5	10	15	0
10:00 - 11:00	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	2	11	13	0
10:15 - 11:15	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	7	13	20	0
10:30 - 11:30	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	8	14	22	0
10:45 - 11:45	1	3	4	1	5	6	0	0	0	0	0	0	1	3	4	11	19	30	0
11:00 - 12:00	0	5	5	0	8	8	0	0	0	0	0	0	0	5	5	10	19	29	0
11:15 - 12:15	0	7	7	0	11	11	0	0	0	0	0	0	0	7	7	4	25	29	0
11:30 - 12:30	1	6	7	1	10	11	0	0	0	0	0	0	1	6	7	5	21	26	0
11:45 - 12:45	1	4	5	1	6	7	0	0	0	0	0	0	1	4	5	4	16	20	0
12:00 - 13:00	2	2	4	3	3	6	0	0	0	0	0	0	2	2	4	10	13	23	0
12:15 - 13:15	3	1	4	5	2	7	0	0	0	0	0	0	3	1	4	13	10	23	0
12:30 - 13:30	2	1	3	4	2	6	0	0	0	0	0	0	2	1	3	11	8	19	0
12:45 - 13:45	2	2	4	4	4	8	0	0	0	0	0	0	2	2	4	10	9	19	0
13:00 - 14:00	3	2	5	5	4	9	0	0	0	0	0	0	3	2	5	7	11	18	0
13:15 - 14:15	3	2	5	5	4	9	0	0	0	0	0	0	3	2	5	11	12	23	0
13:30 - 14:30	3	4	7	5	9	14	0	0	0	0	0	0	3	4	7	11	17	28	0
13:45 - 14:45	4	4	8	6	8	14	0	0	0	0	0	0	4	4	8	13	16	29	0
14:00 - 15:00	2	4	6	3	8	11	0	0	0	0	0	0	2	4	6	13	13	26	0
14:15 - 15:15	3	5	8	3	10	13	0	0	0	0	0	0	3	5	8	9	12	21	0
14:30 - 15:30	3	3	6	3	5	8	0	0	0	0	0	0	3	3	6	12	8	20	0
14:45 - 15:45	2	5	7	2	7	9	0	0	0	0	0	0	2	5	7	11	12	23	0
15:00 - 16:00	4	6	10	5	8	13	0	0	0	0	0	0	4	6	10	14	13	27	0
15:15 - 16:15	2	4	6	3	4	7	0	0	0	0	0	0	2	4	6	19	11	30	0
15:30 - 16:30	4	4	8	5	4	9	0	0	0	0	0	0	4	4	8	19	12	31	0
15:45 - 16:45	5	1	6	7	1	8	0	0	0	0	0	0	5	1	6	21	8	29	0
16:00 - 17:00	3	1	4	4	2	6	0	0	0	0	0	0	3	1	4	15	11	26	0
16:15 - 17:15	3	2	5	4	3	7	0	0	0	0	0	0	3	2	5	9	15	24	0
16:30 - 17:30	2	2	4	3	3	6	0	0	0	0	0	0	2	2	4	7	14	21	0
16:45 - 17:45	2	4	6	3	7	10	0	0	0	0	0	0	2	4	6	6	18	24	0
17:00 - 18:00	3	3	6	5	5	10	0	0	0	0	0	0	3	3	6	8	15	23	0
Peak	**5**	**7**	**10**	**7**	**11**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**7**	**10**	**21**	**25**	**31**	**1**

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 44 - Site 7 Vehicle Trip Generation (Saturday Hourly)

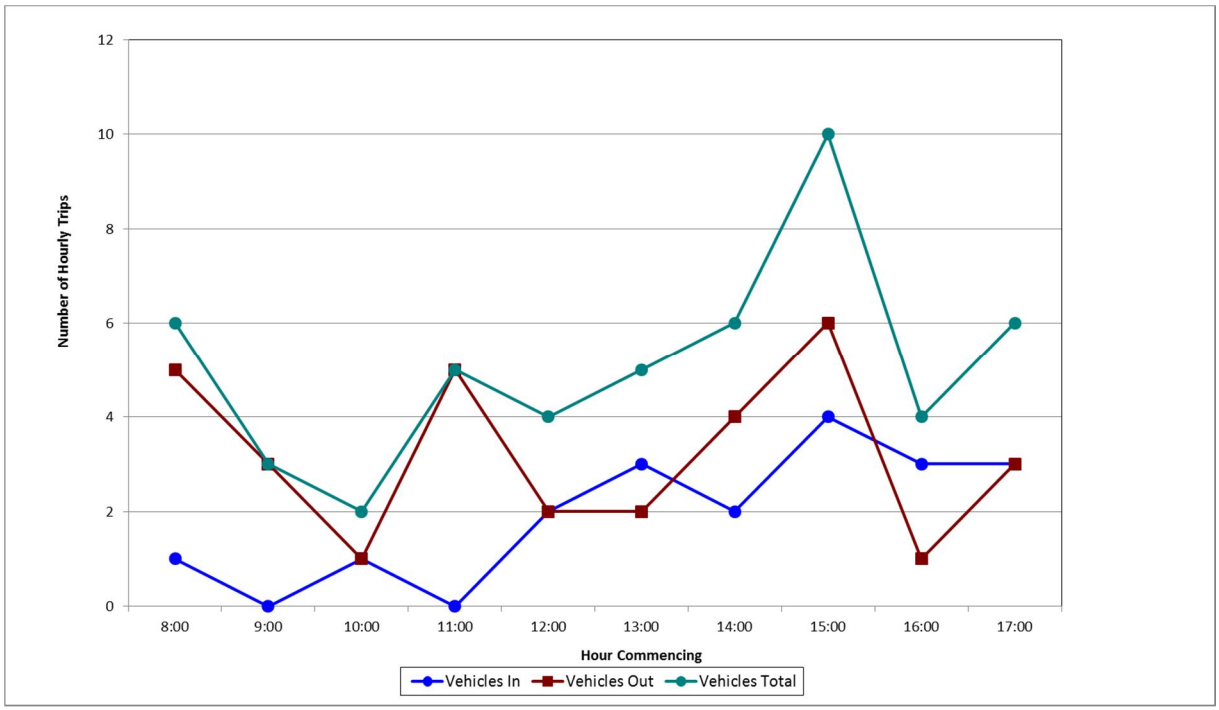
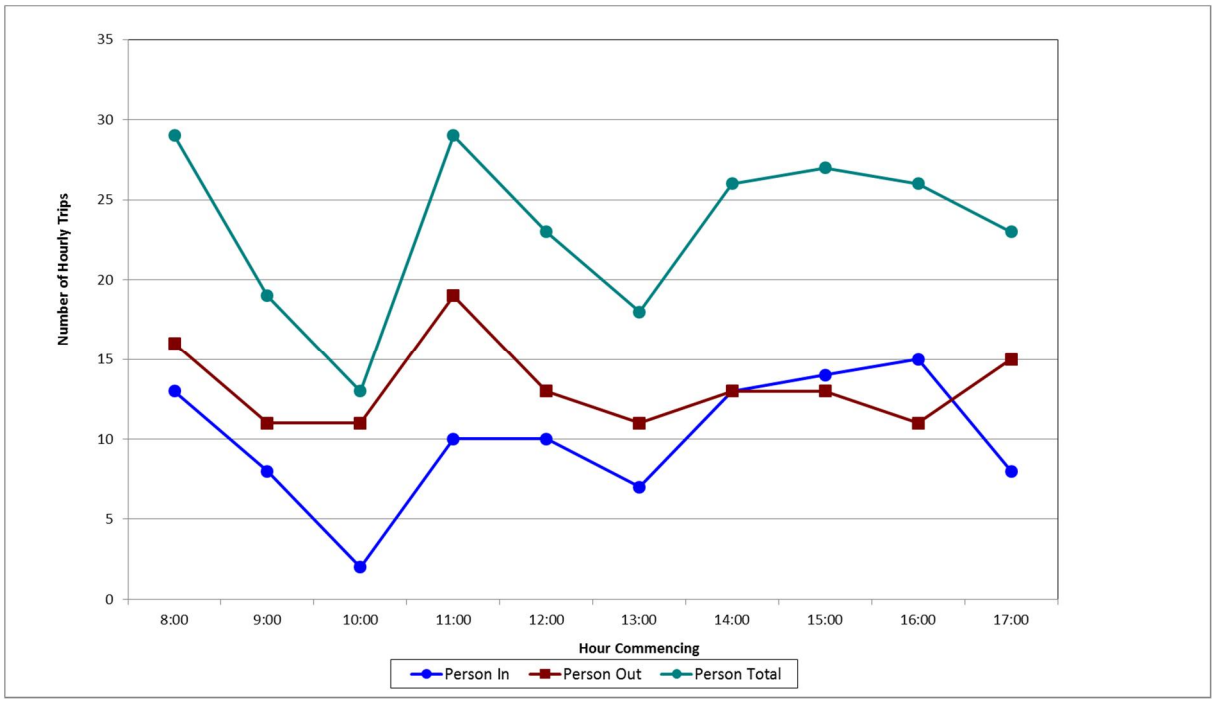


Figure 45 – Site 7 Person Trip Generation (Saturday Hourly)



3.1.8 Site 8: 316 Charlestown Road, Charlestown

Table 36 - Site 8 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	0	5	5	0	7	7	3	6	9	0	0	0	3	11	14	0	9	9	0
6:15 - 7:15	1	5	6	1	7	8	4	7	11	0	0	0	5	12	17	1	9	10	0
6:30 - 7:30	1	8	9	1	10	11	3	8	11	0	0	0	4	16	20	1	14	15	0
6:45 - 7:45	2	6	8	3	6	9	14	16	30	0	0	0	16	22	38	3	10	13	0
7:00 - 8:00	2	9	11	3	10	13	14	15	29	0	0	0	16	24	40	3	15	18	0
7:15 - 8:15	1	11	12	2	12	14	19	18	37	0	0	0	20	29	49	4	18	22	0
7:30 - 8:30	1	7	8	2	8	10	30	21	51	0	0	0	31	28	59	4	13	17	0
7:45 - 8:45	3	8	11	3	10	13	21	15	36	0	0	0	24	23	47	6	17	23	0
8:00 - 9:00	4	5	9	5	6	11	19	14	33	0	0	0	23	19	42	11	13	24	0
8:15 - 9:15	4	3	7	5	4	9	17	12	29	0	0	0	21	15	36	9	14	23	0
8:30 - 9:30	4	8	12	5	11	16	8	9	17	0	0	0	12	17	29	9	23	32	0
8:45 - 9:45	2	8	10	3	10	13	6	8	14	0	0	0	8	16	24	7	23	30	0
9:00 - 10:00	1	7	8	1	9	10	9	12	21	0	0	0	10	19	29	6	21	27	0
9:15 - 10:15	3	12	15	3	14	17	11	25	36	0	0	0	14	37	51	11	27	38	0
9:30 - 10:30	3	10	13	3	10	13	16	25	41	0	0	0	19	35	54	13	20	33	0
9:45 - 10:45	3	14	17	3	15	18	23	24	47	0	0	0	26	38	64	14	23	37	0
10:00 - 11:00	3	14	17	3	15	18	25	25	50	0	0	0	28	39	67	13	23	36	0
10:15 - 11:15	2	12	14	3	15	18	19	11	30	0	0	0	21	23	44	13	23	36	0
10:30 - 11:30	2	9	11	3	12	15	16	9	25	0	0	0	18	18	36	11	21	32	0
10:45 - 11:45	2	3	5	4	5	9	15	12	27	0	0	0	17	15	32	12	13	25	0
11:00 - 12:00	2	5	7	4	7	11	13	7	20	0	0	0	15	12	27	13	18	31	0
11:15 - 12:15	4	4	8	6	4	10	21	11	32	0	0	0	25	15	40	15	14	29	0
11:30 - 12:30	4	8	12	6	7	13	22	17	39	0	0	0	26	25	51	18	16	34	0
11:45 - 12:45	3	13	16	4	15	19	17	15	32	0	0	0	20	28	48	15	25	40	0
12:00 - 13:00	4	15	19	6	17	23	14	15	29	0	0	0	18	30	48	13	23	36	0
12:15 - 13:15	4	13	17	6	15	21	8	10	18	0	0	0	12	23	35	11	19	30	0
12:30 - 13:30	7	9	16	11	12	23	3	7	10	0	0	0	10	16	26	16	18	34	0
12:45 - 13:45	7	4	11	11	4	15	6	7	13	0	0	0	13	11	24	17	10	27	0
13:00 - 14:00	11	0	11	17	0	17	6	8	14	0	0	0	17	8	25	25	6	31	0
13:15 - 14:15	10	3	13	16	4	20	5	12	17	0	0	0	15	15	30	24	12	36	0
13:30 - 14:30	7	4	11	11	6	17	5	13	18	0	0	0	12	17	29	18	14	32	0
13:45 - 14:45	11	4	15	15	6	21	1	9	10	0	0	0	12	13	25	20	12	32	0
14:00 - 15:00	6	4	10	7	9	16	3	10	13	0	0	0	9	14	23	12	16	28	0
14:15 - 15:15	4	3	7	4	5	9	5	9	14	0	0	0	9	12	21	9	11	20	0
14:30 - 15:30	7	3	10	7	5	12	6	7	13	0	0	0	13	10	23	10	10	20	0
14:45 - 15:45	10	5	15	13	8	21	6	7	13	0	0	0	16	12	28	18	13	31	0
15:00 - 16:00	12	9	21	15	9	24	5	5	10	0	0	0	17	14	31	18	16	34	0
15:15 - 16:15	14	7	21	18	9	27	5	4	9	0	0	0	19	11	30	23	14	37	0
15:30 - 16:30	19	6	25	26	7	33	7	4	11	0	0	0	26	10	36	32	12	44	0
15:45 - 16:45	12	8	20	16	9	25	12	9	21	0	0	0	24	17	41	25	18	43	0
16:00 - 17:00	12	7	19	18	9	27	14	12	26	0	0	0	26	19	45	28	16	44	0
16:15 - 17:15	16	8	24	22	10	32	16	13	29	0	0	0	32	21	53	33	17	50	0
16:30 - 17:30	12	8	20	16	10	26	17	11	28	0	0	0	29	19	48	26	20	46	0
16:45 - 17:45	18	7	25	23	12	35	12	11	23	0	0	0	30	18	48	30	19	49	0
17:00 - 18:00	16	8	24	19	12	31	12	11	23	0	0	0	28	19	47	28	20	48	0
17:15 - 18:15	10	7	17	12	11	23	7	11	18	0	0	0	17	18	35	21	20	41	0
17:30 - 18:30	13	9	22	18	14	32	5	13	18	0	0	0	18	22	40	29	20	49	0
17:45 - 18:45	11	8	19	16	11	27	5	11	16	0	0	0	16	19	35	28	18	46	0
18:00 - 19:00	12	4	16	17	7	24	5	13	18	0	0	0	17	17	34	28	15	43	0
Peak	**19**	**15**	**25**	**26**	**17**	**35**	**30**	**25**	**51**	**0**	**0**	**0**	**32**	**39**	**67**	**33**	**27**	**50**	**0**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 46 - Site 8 Vehicle Trip Generation (Weekday)

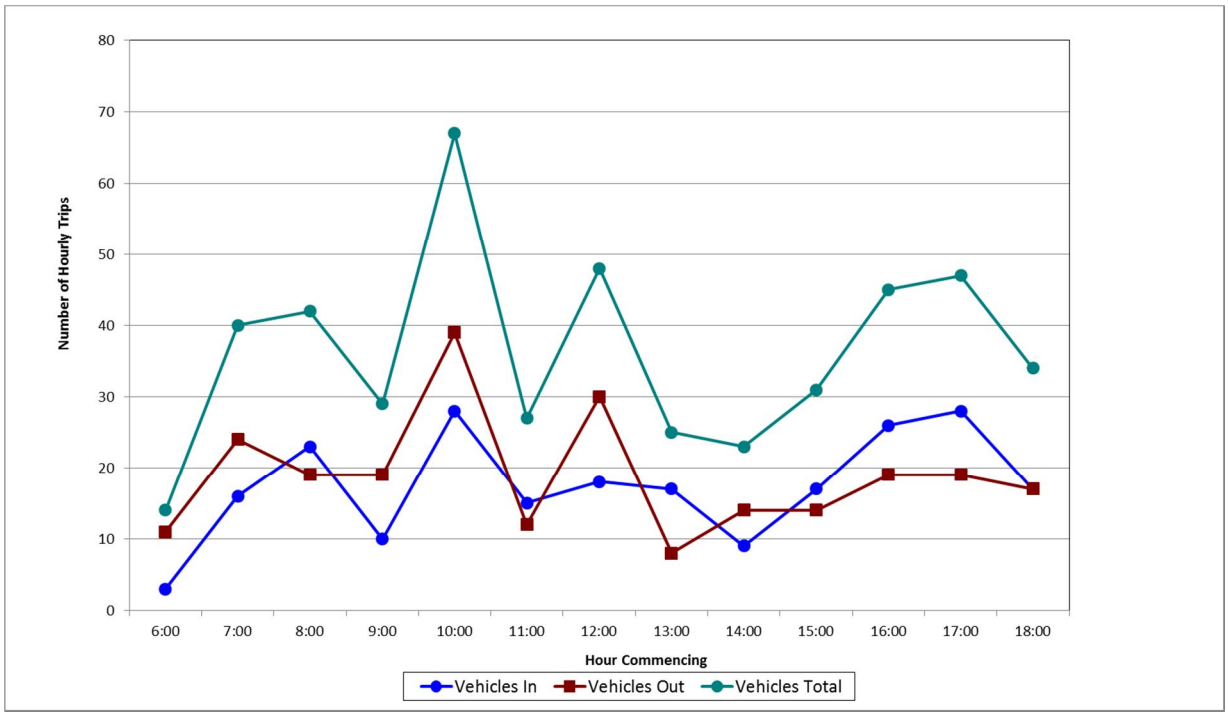


Figure 47 - Site 8 Person Trip Generation (Weekday)

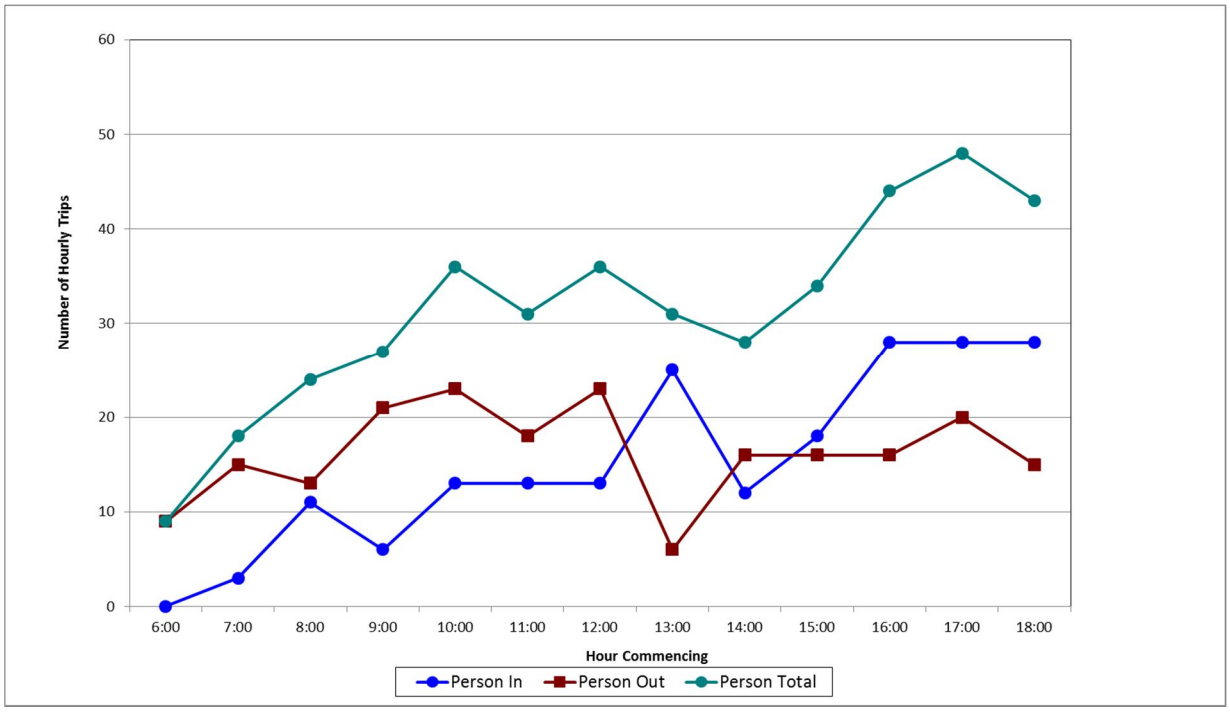


Table 37 - Site 8 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include			Visitors
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	Cars
8:00 - 9:00	0	10	10	0	14	14	0	0	0	0	0	0	0	10	10	5	22	27	0
8:15 - 9:15	1	11	12	1	16	17	0	0	0	0	0	0	1	11	12	6	24	30	0
8:30 - 9:30	1	9	10	1	14	15	0	0	0	0	0	0	1	9	10	7	24	31	0
8:45 - 9:45	2	6	8	3	8	11	0	0	0	0	0	0	2	6	8	9	18	27	0
9:00 - 10:00	2	4	6	3	6	9	0	0	0	0	0	0	2	4	6	9	19	28	0
9:15 - 10:15	3	3	6	4	4	8	0	0	0	0	0	0	3	3	6	14	16	30	0
9:30 - 10:30	3	5	8	4	8	12	2	2	4	0	0	0	5	7	12	12	20	32	0
9:45 - 10:45	3	8	11	4	14	18	5	6	11	0	0	0	8	14	22	10	27	37	0
10:00 - 11:00	6	6	12	8	11	19	9	8	17	0	0	0	15	14	29	14	19	33	0
10:15 - 11:15	5	7	12	7	13	20	11	13	24	0	0	0	16	20	36	12	23	35	0
10:30 - 11:30	8	7	15	12	11	23	13	14	27	0	0	0	21	21	42	18	19	37	0
10:45 - 11:45	10	6	16	14	8	22	10	11	21	0	0	0	20	17	37	20	18	38	0
11:00 - 12:00	10	7	17	15	10	25	7	11	18	0	0	0	17	18	35	20	21	41	0
11:15 - 12:15	12	6	18	20	8	28	8	7	15	0	0	0	20	13	33	23	19	42	0
11:30 - 12:30	10	5	15	17	8	25	8	5	13	0	0	0	18	10	28	21	20	41	0
11:45 - 12:45	10	5	15	17	8	25	8	8	16	0	0	0	18	13	31	23	18	41	0
12:00 - 13:00	9	4	13	14	6	20	7	6	13	0	0	0	16	10	26	23	17	40	0
12:15 - 13:15	10	5	15	14	8	22	9	13	22	0	0	0	19	18	37	23	19	42	0
12:30 - 13:30	9	7	16	12	11	23	6	13	19	0	0	0	15	20	35	20	21	41	0
12:45 - 13:45	7	6	13	10	10	20	9	11	20	0	0	0	16	17	33	18	22	40	0
13:00 - 14:00	8	8	16	12	12	24	9	11	20	0	0	0	17	19	36	17	25	42	0
13:15 - 14:15	4	7	11	6	10	16	5	4	9	0	0	0	9	11	20	16	24	40	0
13:30 - 14:30	6	8	14	8	5	13	5	5	10	0	0	0	11	13	24	22	20	42	0
13:45 - 14:45	6	10	16	8	3	11	2	3	5	0	0	0	8	13	21	22	18	40	0
14:00 - 15:00	7	8	15	9	1	10	4	3	7	0	0	0	11	11	22	29	16	45	0
14:15 - 15:15	7	9	16	9	2	11	4	3	7	0	0	0	11	12	23	23	16	39	0
14:30 - 15:30	8	6	14	11	5	16	7	4	11	0	0	0	15	10	25	27	17	44	0
14:45 - 15:45	7	5	12	9	8	17	7	4	11	0	0	0	14	9	23	27	18	45	0
15:00 - 16:00	5	6	11	7	9	16	6	7	13	0	0	0	11	13	24	21	16	37	0
15:15 - 16:15	9	5	14	13	8	21	5	10	15	0	0	0	14	15	29	30	13	43	0
15:30 - 16:30	7	4	11	12	5	17	3	10	13	0	0	0	10	14	24	26	11	37	0
15:45 - 16:45	13	2	15	20	2	22	3	13	16	0	0	0	16	15	31	32	12	44	0
16:00 - 17:00	16	1	17	25	1	26	3	10	13	0	0	0	19	11	30	40	22	62	0
16:15 - 17:15	13	1	14	22	1	23	4	6	10	0	0	0	17	7	24	39	21	60	0
16:30 - 17:30	17	5	22	25	5	30	2	7	9	0	0	0	19	12	31	39	23	62	0
16:45 - 17:45	15	6	21	21	6	27	4	5	9	0	0	0	19	11	30	33	20	53	0
17:00 - 18:00	13	8	21	18	9	27	5	8	13	0	0	0	18	16	34	25	15	40	0
Peak	**17**	**11**	**22**	**25**	**16**	**30**	**13**	**14**	**27**	**0**	**0**	**0**	**21**	**21**	**42**	**40**	**27**	**62**	**0**

Peak 1-hour period for car trips/person trips

All-day Peak Hour on Adjacent Road

Figure 48 – Site 8 Vehicle Trip Generation (Saturday)

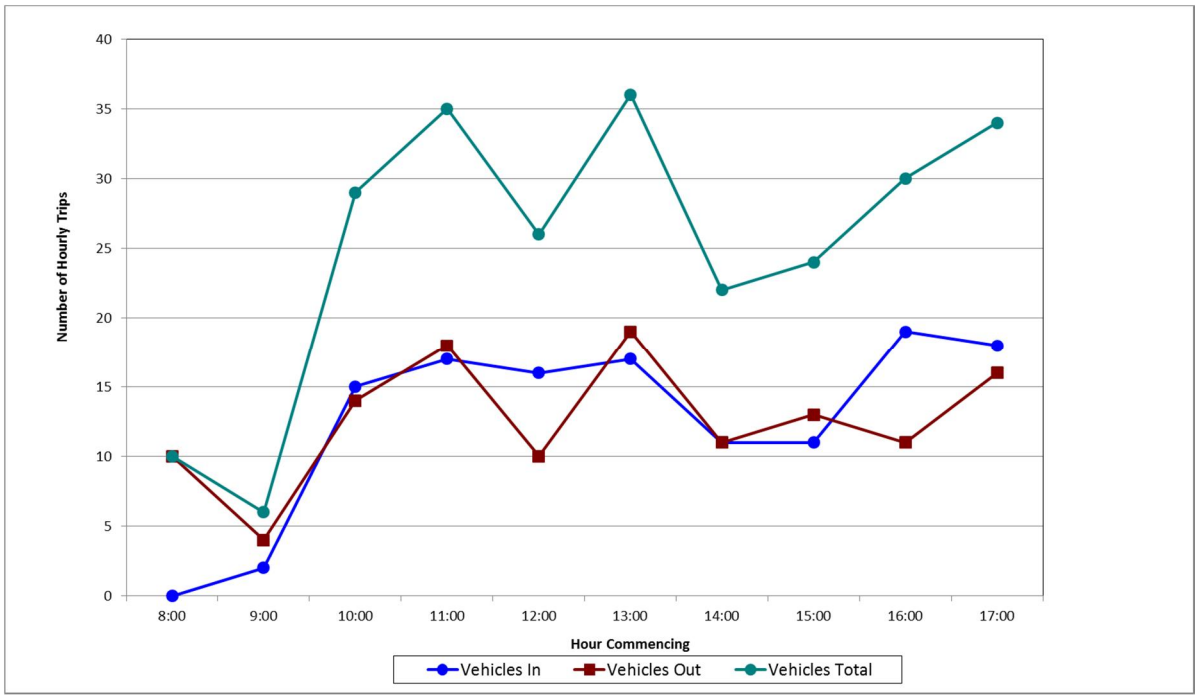
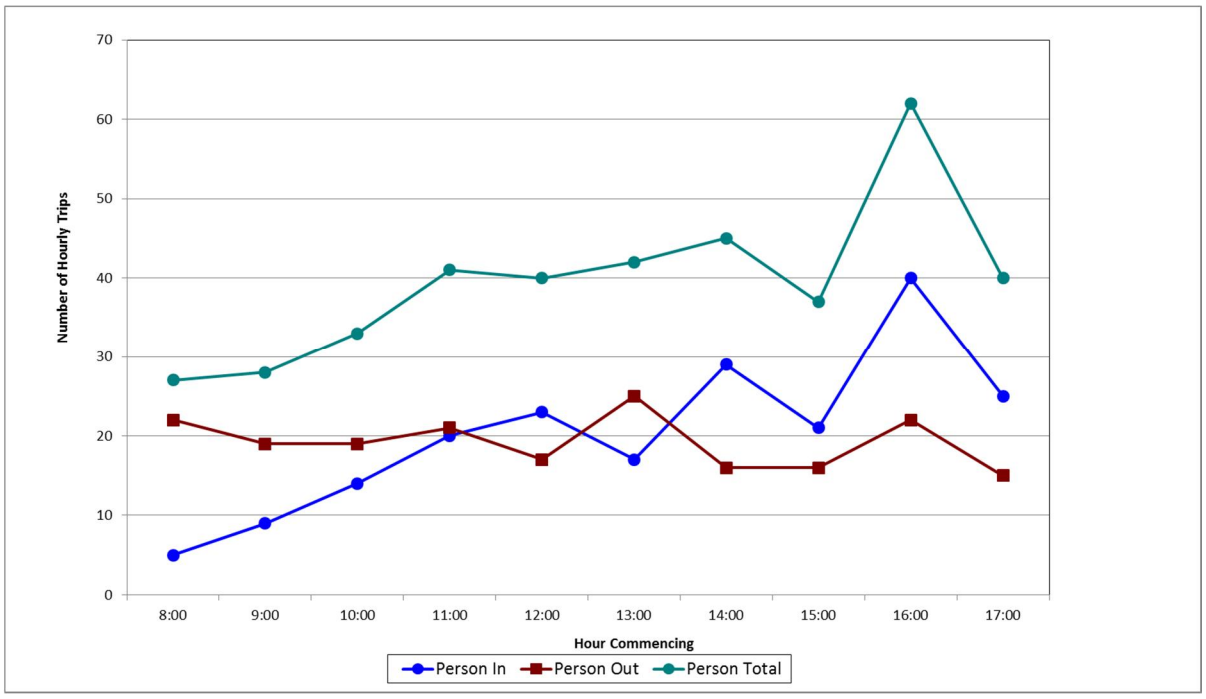


Figure 49 – Site 8 Person Trip Generation (Saturday)



3.1.9 Site 9: 3-5 Corrimal Street, Wollongong

Table 38 - Site 9 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	2	2	0
6:15 - 7:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	2	2	1
6:30 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1
6:45 - 7:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	1	2	3	1
7:00 - 8:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	1	1	2	3
7:15 - 8:15	1	3	4	1	4	5	0	0	0	0	0	0	1	3	4	1	5	6	4
7:30 - 8:30	1	3	4	1	4	5	0	0	0	0	0	0	1	3	4	1	5	6	6
7:45 - 8:45	0	4	4	0	5	5	0	0	0	0	0	0	0	4	4	0	6	6	8
8:00 - 9:00	1	5	6	1	6	7	0	0	0	0	0	0	1	5	6	1	7	8	8
8:15 - 9:15	1	4	5	1	5	6	0	0	0	0	0	0	1	4	5	1	6	7	8
8:30 - 9:30	2	6	8	2	8	10	0	0	0	0	0	0	2	6	8	2	8	10	8
8:45 - 9:45	2	5	7	2	7	9	0	0	0	0	0	0	2	5	7	2	9	11	8
9:00 - 10:00	1	5	6	1	8	9	0	0	0	0	0	0	1	5	6	4	10	14	8
9:15 - 10:15	1	4	5	1	6	7	0	0	0	0	0	0	1	4	5	4	8	12	7
9:30 - 10:30	2	2	4	2	3	5	0	0	0	0	0	0	2	2	4	5	5	10	7
9:45 - 10:45	3	2	5	4	3	7	0	0	0	0	0	0	3	2	5	7	4	11	7
10:00 - 11:00	3	2	5	4	2	6	0	0	0	0	0	0	3	2	5	4	3	7	7
10:15 - 11:15	3	1	4	4	1	5	0	0	0	0	0	0	3	1	4	6	4	10	8
10:30 - 11:30	1	1	2	2	1	3	0	0	0	0	0	0	1	1	2	4	4	8	6
10:45 - 11:45	1	3	4	2	3	5	0	0	0	0	0	0	1	3	4	4	6	10	5
11:00 - 12:00	3	3	6	4	4	8	0	0	0	0	0	0	3	3	6	6	7	13	4
11:15 - 12:15	4	3	7	5	4	9	0	0	0	0	0	0	4	3	7	7	6	13	3
11:30 - 12:30	4	3	7	5	4	9	0	0	0	0	0	0	4	3	7	7	6	13	4
11:45 - 12:45	3	1	4	3	2	5	0	0	0	0	0	0	3	1	4	5	3	8	4
12:00 - 13:00	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	3	3	6	4
12:15 - 13:15	1	3	4	2	3	5	0	0	0	0	0	0	1	3	4	2	3	5	4
12:30 - 13:30	1	3	4	2	3	5	0	0	0	0	0	0	1	3	4	3	3	6	4
12:45 - 13:45	2	3	5	3	3	6	0	0	0	0	0	0	2	3	5	4	4	8	4
13:00 - 14:00	2	1	3	3	1	4	0	0	0	0	0	0	2	1	3	4	2	6	4
13:15 - 14:15	3	0	3	3	0	3	0	0	0	0	0	0	3	0	3	7	1	8	4
13:30 - 14:30	4	0	4	5	0	5	0	0	0	0	0	0	4	0	4	8	1	9	4
13:45 - 14:45	3	0	3	4	0	4	0	0	0	0	0	0	3	0	3	7	0	7	4
14:00 - 15:00	3	0	3	4	0	4	0	0	0	0	0	0	3	0	3	8	0	8	4
14:15 - 15:15	3	0	3	5	0	5	0	0	0	0	0	0	3	0	3	6	0	6	4
14:30 - 15:30	2	1	3	3	1	4	0	0	0	0	0	0	2	1	3	4	1	5	4
14:45 - 15:45	2	1	3	3	1	4	0	0	0	0	0	0	2	1	3	4	3	7	4
15:00 - 16:00	2	1	3	3	1	4	0	0	0	0	0	0	2	1	3	3	3	6	3
15:15 - 16:15	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	2	4	6	2
15:30 - 16:30	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	2	3	5	1
15:45 - 16:45	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	2	1	3	0
16:00 - 17:00	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	3	2	5	1
16:15 - 17:15	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	7	8	2
16:30 - 17:30	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	4	7	11	3
16:45 - 17:45	2	1	3	2	1	3	0	0	0	0	0	0	2	1	3	5	7	12	4
17:00 - 18:00	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	4	6	10	4
17:15 - 18:15	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	6	3	9	4
17:30 - 18:30	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	4	3	7	4
17:45 - 18:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	3	3	6	4
18:00 - 19:00	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	3	3	6	4
Peak	**4**	**6**	**8**	**5**	**8**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**	**8**	**8**	**10**	**14**	**8**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 50 - Site 9 Vehicle Trip Generation (Weekday)

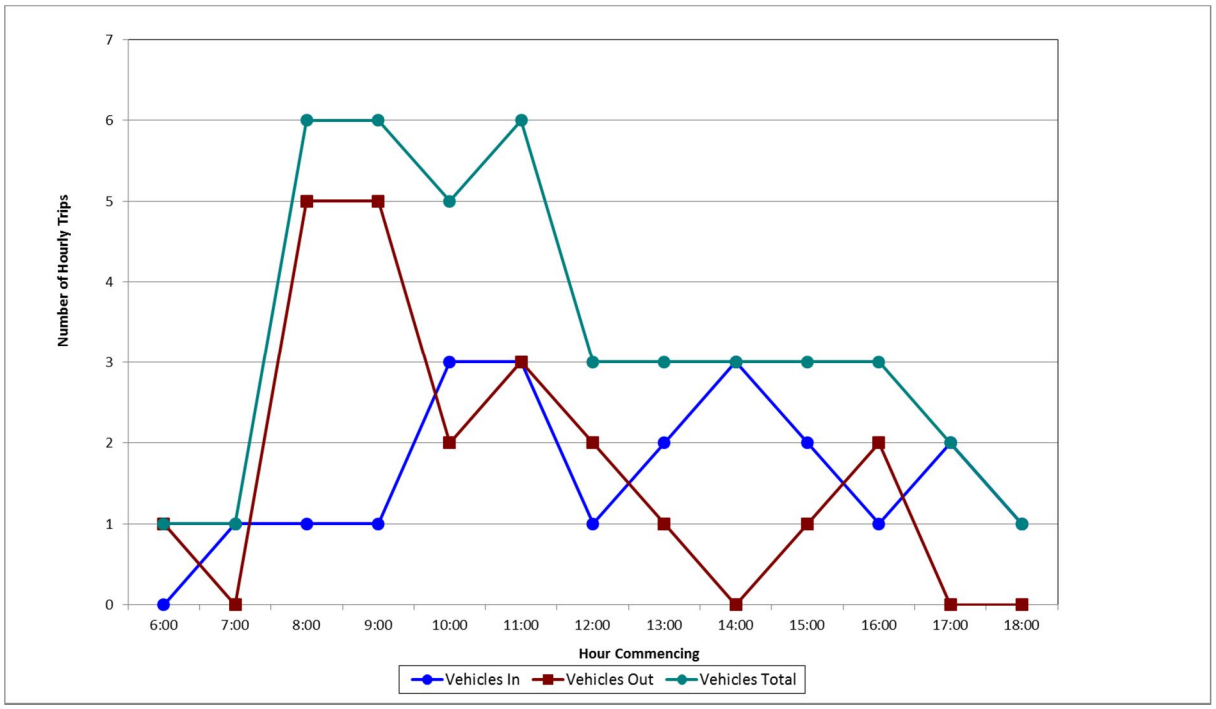


Figure 51 - Site 9 Person Trip Generation (Weekday)

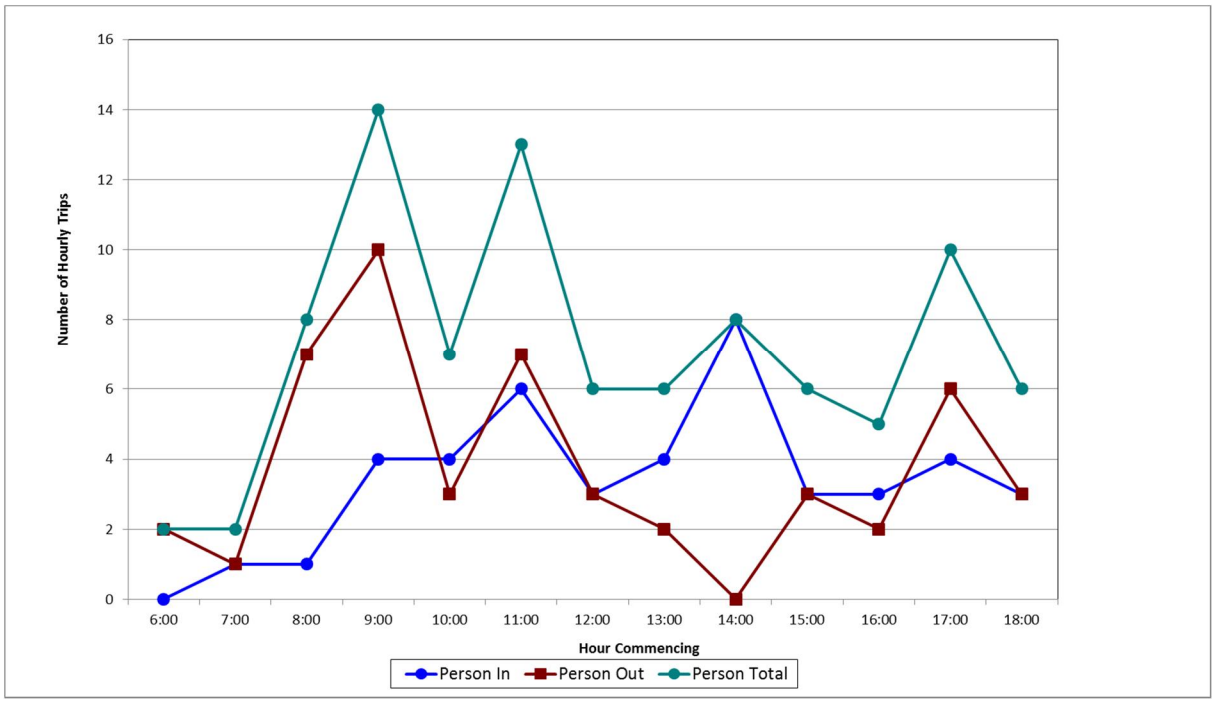


Table 39 - Site 9 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	3	6	9	0
8:15 - 9:15	0	3	3	0	5	5	0	0	0	0	0	0	0	3	3	2	8	10	0
8:30 - 9:30	0	3	3	0	5	5	0	0	0	0	0	0	0	3	3	5	8	13	0
8:45 - 9:45	0	4	4	0	9	9	0	0	0	0	0	0	0	4	4	5	12	17	0
9:00 - 10:00	0	4	4	0	9	9	0	0	0	0	0	0	0	4	4	4	13	17	0
9:15 - 10:15	1	3	4	1	7	8	0	0	0	0	0	0	1	3	4	5	10	15	0
9:30 - 10:30	2	5	7	3	10	13	0	0	0	0	0	0	2	5	7	4	12	16	0
9:45 - 10:45	3	4	7	5	6	11	0	0	0	0	0	0	3	4	7	7	8	15	0
10:00 - 11:00	3	4	7	5	6	11	0	0	0	0	0	0	3	4	7	7	7	14	0
10:15 - 11:15	2	2	4	4	3	7	0	0	0	0	0	0	2	2	4	7	4	11	0
10:30 - 11:30	2	0	2	3	0	3	0	0	0	0	0	0	2	0	2	6	0	6	0
10:45 - 11:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	2	0	2	0
11:00 - 12:00	1	1	2	1	2	3	0	0	0	0	1	1	1	1	2	2	3	5	0
11:15 - 12:15	2	2	4	3	3	6	0	0	0	0	2	2	2	2	4	3	5	8	0
11:30 - 12:30	1	2	3	2	3	5	0	0	0	0	2	2	1	2	3	3	6	9	0
11:45 - 12:45	1	2	3	2	3	5	0	0	0	0	2	2	1	2	3	3	7	10	0
12:00 - 13:00	1	1	2	2	1	3	0	0	0	0	1	1	1	1	2	3	5	8	0
12:15 - 13:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	4	6	0
12:30 - 13:30	0	1	1	0	2	2	0	0	0	0	1	1	0	1	1	2	6	8	0
12:45 - 13:45	1	1	2	2	2	4	0	0	0	0	1	1	1	1	2	4	5	9	0
13:00 - 14:00	1	1	2	2	2	4	0	0	0	0	1	1	1	1	2	4	5	9	0
13:15 - 14:15	2	1	3	4	2	6	0	0	0	0	0	0	2	1	3	5	4	9	0
13:30 - 14:30	2	0	2	4	0	4	0	0	0	0	0	0	2	0	2	4	3	7	0
13:45 - 14:45	1	0	1	2	0	2	0	0	0	0	0	0	1	0	1	3	3	6	0
14:00 - 15:00	1	0	1	2	0	2	0	0	0	0	0	0	1	0	1	3	2	5	0
14:15 - 15:15	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	2	3	5	0
14:30 - 15:30	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	2	2	4	0
14:45 - 15:45	1	2	3	1	3	4	0	0	0	0	0	0	1	2	3	3	5	8	0
15:00 - 16:00	2	3	5	3	4	7	0	0	0	0	0	0	2	3	5	6	7	13	0
15:15 - 16:15	2	2	4	3	3	6	0	0	0	0	0	0	2	2	4	7	6	13	0
15:30 - 16:30	3	2	5	4	3	7	0	0	0	0	0	0	3	2	5	8	5	13	0
15:45 - 16:45	4	1	5	6	1	7	0	0	0	0	0	0	4	1	5	9	2	11	0
16:00 - 17:00	3	0	3	4	0	4	0	0	0	0	0	0	3	0	3	6	0	6	0
16:15 - 17:15	2	0	2	3	0	3	0	0	0	0	0	0	2	0	2	4	0	4	0
16:30 - 17:30	2	0	2	4	0	4	0	0	0	0	0	0	2	0	2	5	0	5	0
16:45 - 17:45	2	2	4	3	2	5	0	0	0	0	0	0	2	2	4	3	3	6	0
17:00 - 18:00	2	4	6	3	5	8	0	0	0	0	0	0	2	4	6	3	6	9	0
Peak	**4**	**5**	**7**	**6**	**10**	**13**	**0**	**0**	**0**	**0**	**2**	**2**	**4**	**5**	**7**	**9**	**13**	**17**	**0**

Peak 1-hour period for car trips/person trips

All-Day Peak Hour on Adjacent Road

Figure 52 - Site 9 Vehicle Trip Generation (Saturday)

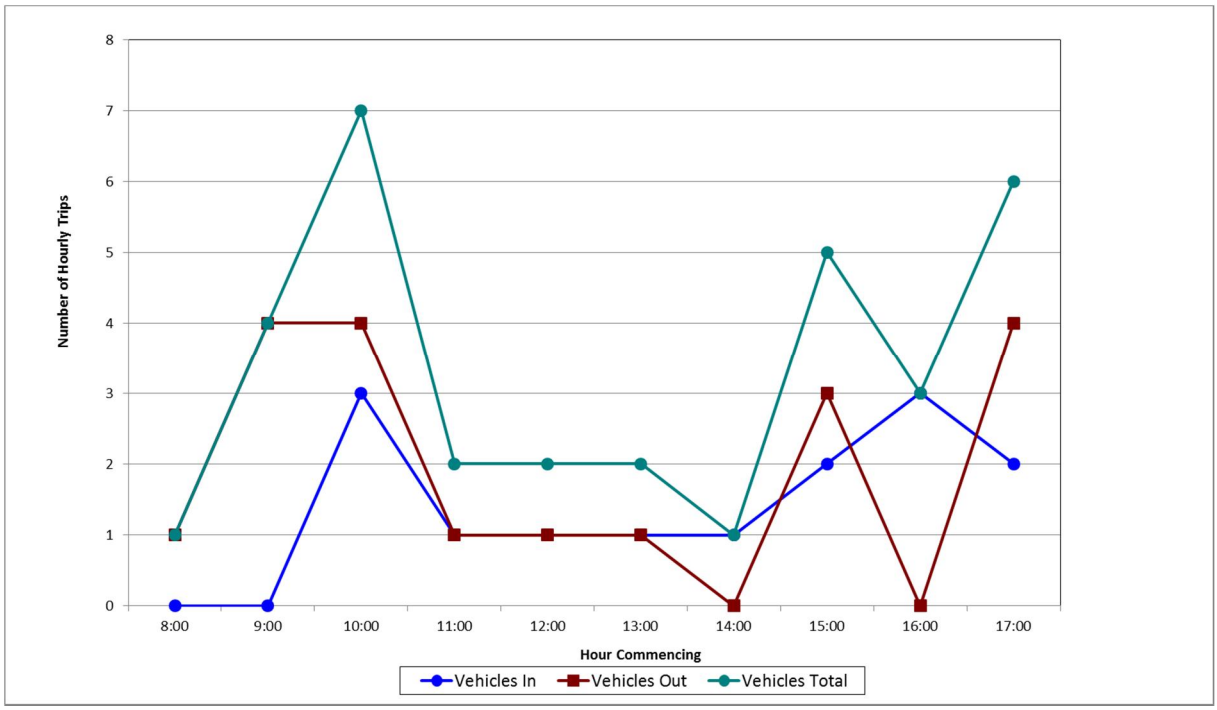
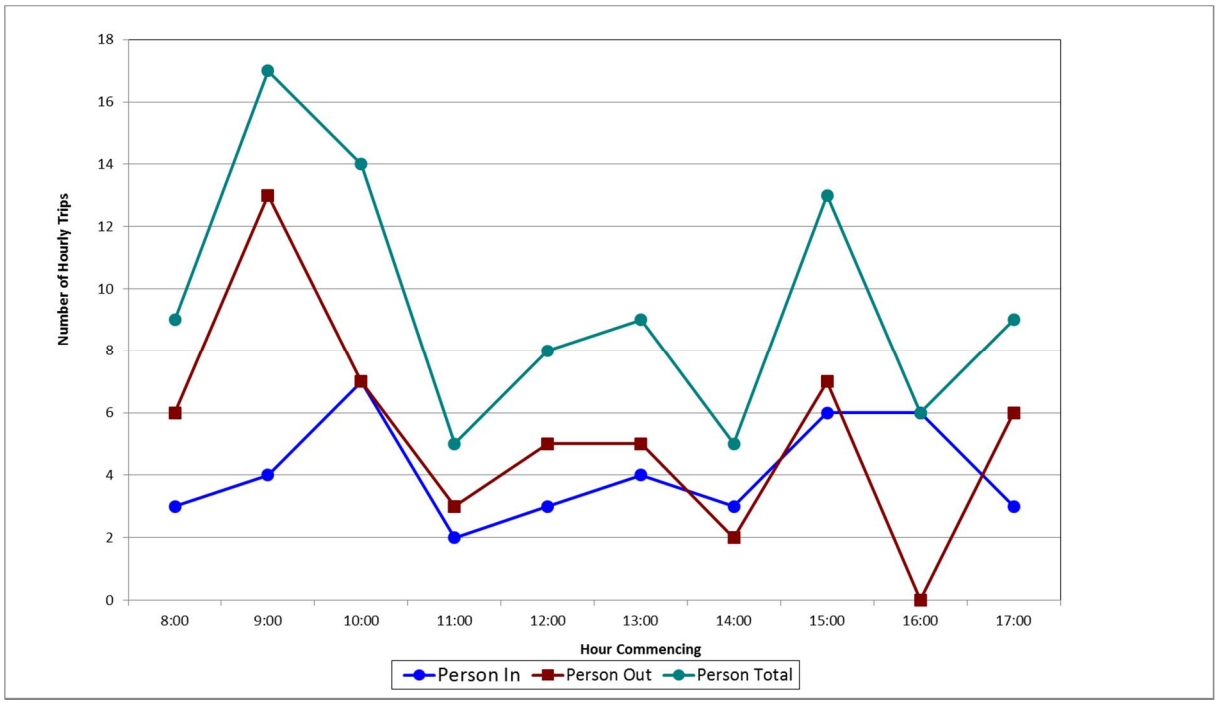


Figure 53 – Site 9 Person Trip Generation (Saturday)



3.1.10 Site 10: 208 Harris Street, Pyrmont

Table 40 - Site 10 Survey Results (Weekday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
6:00 - 7:00	2	2	4	2	2	4	0	0	0	0	0	0	2	2	4	3	8	11	0
6:15 - 7:15	2	4	6	2	4	6	0	0	0	0	0	0	2	4	6	4	15	19	0
6:30 - 7:30	2	6	8	2	6	8	0	2	2	0	2	2	2	8	10	5	17	22	0
6:45 - 7:45	1	11	12	1	11	12	0	2	2	0	2	2	1	13	14	5	31	36	0
7:00 - 8:00	2	14	16	2	14	16	0	2	2	0	2	2	2	16	18	8	35	43	0
7:15 - 8:15	4	13	17	5	13	18	0	2	2	0	2	2	4	15	19	12	44	56	0
7:30 - 8:30	5	15	20	6	15	21	0	0	0	0	0	0	5	15	20	12	56	68	0
7:45 - 8:45	6	14	20	7	16	23	0	0	0	0	0	0	6	14	20	14	69	83	0
8:00 - 9:00	10	13	23	11	15	26	0	0	0	0	0	0	10	13	23	17	74	91	0
8:15 - 9:15	8	11	19	8	13	21	0	0	0	0	0	0	8	11	19	12	63	75	0
8:30 - 9:30	7	6	13	7	8	15	0	0	0	0	0	0	7	6	13	13	46	59	0
8:45 - 9:45	7	3	10	7	3	10	0	0	0	0	0	0	7	3	10	12	24	36	0
9:00 - 10:00	5	1	6	5	1	6	0	0	0	0	0	0	5	1	6	10	16	26	0
9:15 - 10:15	6	1	7	7	1	8	0	0	0	0	0	0	6	1	7	12	14	26	0
9:30 - 10:30	7	1	8	8	1	9	1	0	1	2	0	2	8	1	9	17	15	32	0
9:45 - 10:45	7	0	7	8	0	8	1	0	1	2	0	2	8	0	8	19	16	35	0
10:00 - 11:00	4	0	4	5	0	5	3	1	4	5	1	6	7	1	8	17	15	32	0
10:15 - 11:15	4	1	5	5	1	6	3	1	4	5	1	6	7	2	9	18	15	33	0
10:30 - 11:30	4	2	6	5	3	8	2	2	4	3	3	6	6	4	10	13	21	34	0
10:45 - 11:45	3	2	5	4	3	7	3	2	5	3	3	6	6	4	10	11	18	29	0
11:00 - 12:00	4	2	6	5	3	8	1	1	2	0	2	2	5	3	8	9	18	27	0
11:15 - 12:15	4	2	6	4	3	7	1	1	2	0	2	2	5	3	8	10	16	26	0
11:30 - 12:30	4	1	5	4	1	5	1	1	2	0	1	1	5	2	7	11	12	23	0
11:45 - 12:45	4	2	6	4	2	6	1	1	2	1	1	2	5	3	8	12	12	24	0
12:00 - 13:00	3	2	5	3	2	5	1	1	2	1	1	2	4	3	7	19	10	29	0
12:15 - 13:15	3	2	5	3	2	5	1	1	2	1	1	2	4	3	7	16	8	24	0
12:30 - 13:30	2	3	5	2	3	5	1	1	2	1	2	3	3	4	7	17	11	28	0
12:45 - 13:45	1	5	6	1	5	6	0	1	1	0	2	2	1	6	7	18	11	29	0
13:00 - 14:00	1	6	7	1	9	10	0	1	1	0	2	2	1	7	8	14	16	30	0
13:15 - 14:15	0	5	5	0	8	8	0	1	1	0	2	2	0	6	6	14	19	33	0
13:30 - 14:30	0	5	5	0	8	8	0	1	1	0	1	1	0	6	6	11	16	27	0
13:45 - 14:45	0	3	3	0	6	6	0	1	1	0	1	1	0	4	4	11	16	27	0
14:00 - 15:00	0	3	3	0	3	3	0	1	1	0	1	1	0	4	4	10	13	23	0
14:15 - 15:15	0	5	5	0	5	5	0	1	1	0	1	1	0	6	6	14	18	32	0
14:30 - 15:30	2	4	6	3	4	7	1	0	1	1	0	1	3	4	7	19	16	35	0
14:45 - 15:45	4	4	8	5	4	9	1	0	1	1	0	1	5	4	9	19	16	35	0
15:00 - 16:00	5	3	8	7	3	10	2	0	2	2	0	2	7	3	10	24	14	38	0
15:15 - 16:15	6	3	9	9	7	16	2	0	2	2	0	2	8	3	11	23	17	40	0
15:30 - 16:30	6	4	10	8	8	16	1	0	1	1	0	1	7	4	11	25	21	46	0
15:45 - 16:45	4	3	7	6	7	13	1	0	1	1	0	1	5	3	8	23	21	44	0
16:00 - 17:00	5	4	9	8	8	16	0	0	0	0	0	0	5	4	9	22	24	46	0
16:15 - 17:15	7	3	10	11	3	14	0	0	0	0	0	0	7	3	10	27	14	41	0
16:30 - 17:30	7	5	12	11	5	16	1	0	1	1	0	1	8	5	13	28	20	48	0
16:45 - 17:45	8	8	16	12	9	21	2	0	2	2	0	2	10	8	18	37	22	59	0
17:00 - 18:00	7	8	15	9	9	18	2	0	2	2	0	2	9	8	17	43	25	68	0
17:15 - 18:15	8	9	17	9	10	19	2	0	2	2	0	2	10	9	19	50	29	79	0
17:30 - 18:30	7	9	16	8	10	18	1	0	1	1	0	1	8	9	17	49	22	71	0
17:45 - 18:45	7	6	13	8	6	14	0	0	0	0	0	0	7	6	13	45	20	65	0
18:00 - 19:00	7	5	12	8	5	13	1	0	1	1	0	1	8	5	13	44	16	60	0
Peak	**10**	**15**	**23**	**12**	**16**	**26**	**3**	**2**	**5**	**5**	**3**	**6**	**10**	**16**	**23**	**50**	**74**	**91**	**0**

Peak 1-hour period for car trips/person trips

Morning Peak Hour on Adjacent Road

Evening Peak Hour on Adjacent Road

Figure 54 - Site 10 Vehicle Trip Generation (Weekday)

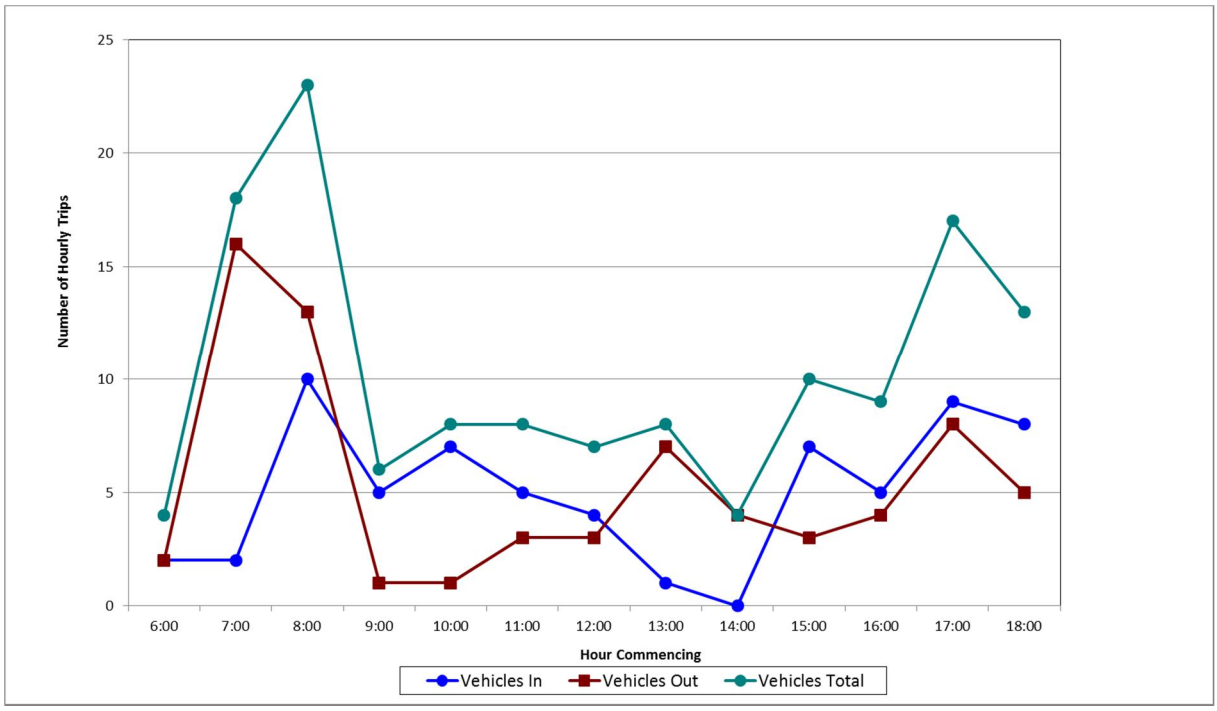


Figure 55 – Site 10 Person Trip Generation (Weekday)

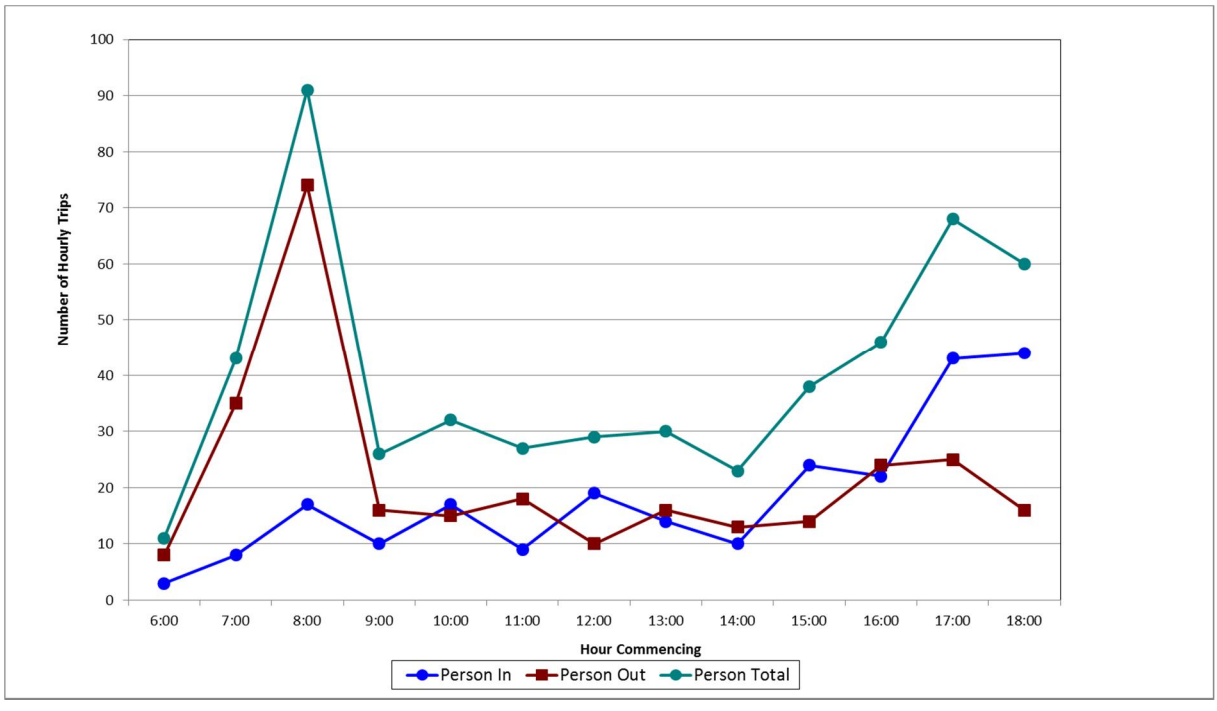


Table 41 - Site 10 Survey Results (Saturday Hourly)

	Non-Commercial Vehicles			Occupants			Commercial Vehicles			Occupants			Total Vehicles			Total Person (include pedestrians)			Visitors Cars Outside
	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
8:00 - 9:00	6	5	11	6	5	11	0	0	0	0	0	0	6	5	11	13	26	39	0
8:15 - 9:15	7	5	12	7	6	13	0	0	0	0	0	0	7	5	12	14	28	42	0
8:30 - 9:30	7	8	15	8	11	19	0	0	0	0	0	0	7	8	15	17	32	49	0
8:45 - 9:45	5	8	13	6	11	17	0	1	1	0	1	1	5	9	14	14	25	39	0
9:00 - 10:00	3	12	15	4	18	22	0	1	1	0	1	1	3	13	16	13	32	45	0
9:15 - 10:15	5	12	17	7	17	24	0	1	1	0	1	1	5	13	18	16	31	47	0
9:30 - 10:30	6	13	19	7	22	29	1	1	2	1	1	2	7	14	21	16	41	57	0
9:45 - 10:45	7	17	24	9	29	38	1	0	1	1	0	1	8	17	25	17	46	63	0
10:00 - 11:00	8	11	19	10	20	30	1	0	1	1	0	1	9	11	20	18	38	56	0
10:15 - 11:15	7	10	17	11	20	31	1	0	1	1	0	1	8	10	18	24	46	70	0
10:30 - 11:30	6	8	14	10	13	23	0	0	0	0	0	0	6	8	14	24	34	58	0
10:45 - 11:45	8	4	12	11	7	18	1	0	1	1	0	1	9	4	13	33	38	71	0
11:00 - 12:00	7	7	14	11	12	23	1	0	1	1	0	1	8	7	15	36	46	82	0
11:15 - 12:15	5	8	13	6	14	20	1	0	1	1	0	1	6	8	14	31	47	78	0
11:30 - 12:30	8	8	16	10	16	26	1	0	1	1	0	1	9	8	17	34	50	84	0
11:45 - 12:45	6	11	17	9	21	30	0	0	0	0	0	0	6	11	17	31	50	81	0
12:00 - 13:00	7	9	16	9	18	27	0	0	0	0	0	0	7	9	16	32	49	81	0
12:15 - 13:15	8	12	20	10	20	30	0	0	0	0	0	0	8	12	20	40	44	84	0
12:30 - 13:30	5	13	18	6	19	25	0	0	0	0	0	0	5	13	18	37	51	88	0
12:45 - 13:45	6	13	19	5	20	25	0	0	0	0	0	0	6	13	19	36	50	86	0
13:00 - 14:00	7	14	21	8	21	29	0	0	0	0	0	0	7	14	21	43	50	93	0
13:15 - 14:15	6	13	19	7	21	28	0	1	1	0	1	1	6	14	20	38	61	99	0
13:30 - 14:30	6	11	17	8	19	27	0	1	1	0	1	1	6	12	18	41	61	102	0
13:45 - 14:45	6	7	13	10	11	21	0	2	2	0	2	2	6	9	15	41	63	104	0
14:00 - 15:00	5	5	10	8	8	16	0	2	2	0	2	2	5	7	12	30	62	92	0
14:15 - 15:15	6	3	9	9	4	13	0	1	1	0	1	1	6	4	10	24	46	70	0
14:30 - 15:30	8	2	10	10	4	14	0	1	1	0	1	1	8	3	11	26	32	58	0
14:45 - 15:45	8	4	12	10	6	16	0	0	0	0	0	0	8	4	12	29	22	51	0
15:00 - 16:00	9	5	14	10	8	18	0	0	0	0	0	0	9	5	14	34	16	50	0
15:15 - 16:15	8	4	12	9	7	16	0	0	0	0	0	0	8	4	12	37	14	51	0
15:30 - 16:30	6	4	10	8	5	13	0	0	0	0	0	0	6	4	10	32	11	43	0
15:45 - 16:45	6	2	8	8	3	11	0	0	0	0	2	2	6	2	8	31	11	42	0
16:00 - 17:00	5	2	7	9	3	12	0	1	1	0	3	3	5	3	8	28	12	40	0
16:15 - 17:15	6	1	7	14	2	16	1	1	2	1	3	4	7	2	9	32	13	45	0
16:30 - 17:30	6	1	7	13	2	15	1	1	2	1	3	4	7	2	9	38	14	52	0
16:45 - 17:45	6	2	8	13	3	16	1	2	3	1	4	5	7	4	11	33	18	51	0
17:00 - 18:00	6	4	10	12	5	17	1	1	2	1	3	4	7	5	12	38	21	59	0
Peak	**9**	**17**	**24**	**14**	**29**	**38**	**1**	**2**	**3**	**1**	**4**	**5**	**9**	**17**	**25**	**43**	**63**	**104**	**0**

Peak 1-hour period for car trips/person trips

Evening Peak Hour on Adjacent Road

Figure 56 - Site 10 Vehicle Trip Generation (Saturday)

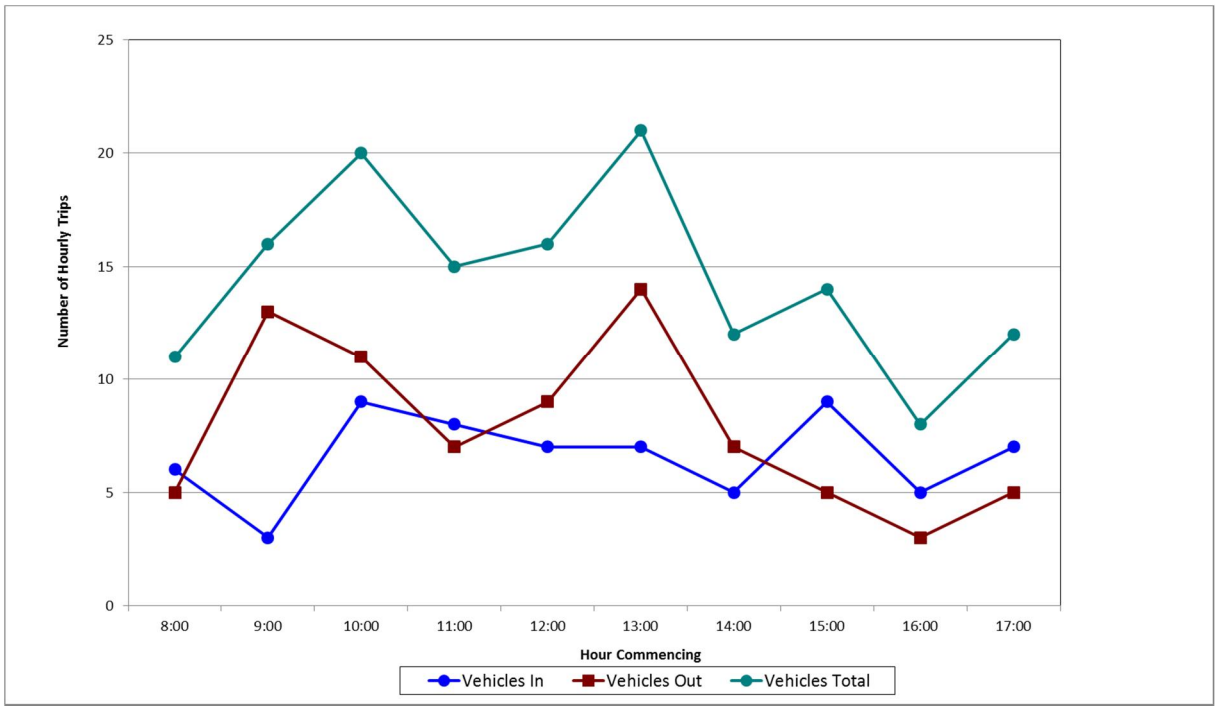
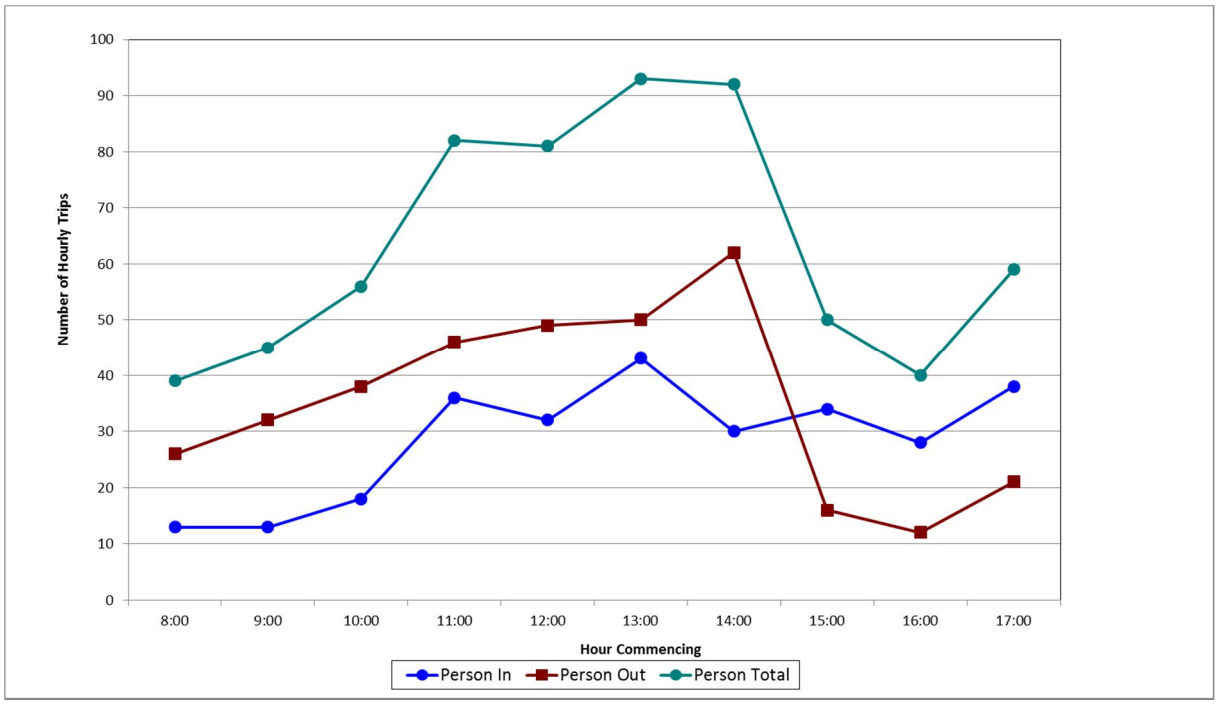


Figure 57 - Site 10 Person Trip Generation (Saturday)



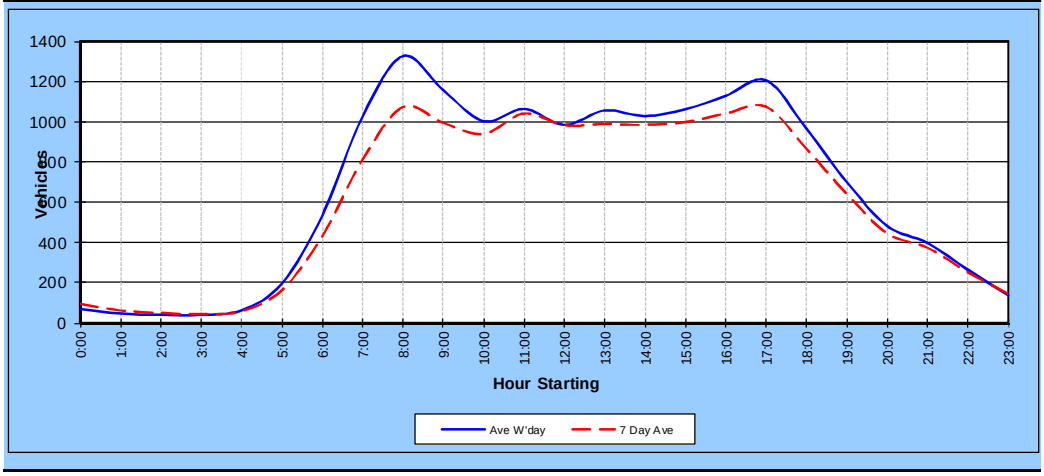
3.2 Automatic Traffic Count (ATC) Survey Results

3.2.1 Site 1: 13 Herbert Street, St Leonards

Road	Herbert Street,	
Location	St Leonards	
Site No.	2	
Start Date	Thursday	8-Mar-12
Direction	Combined	

Average Weekday	15968
7 Day Average	14548
Weekday Heavy's	4.3%
7 Day Heavy's	4.4%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Time	12-Mar	13-Mar	14-Mar	8-Mar	9-Mar	10-Mar	11-Mar	W'day	Ave
AM Peak	1375	1349	1315	1312	1278	1081	886		
PM Peak	1111	1177	1256	1303	1188	1087	869		
0:00	71	45	65	87	83	150	165	70	95
1:00	39	48	32	56	54	91	111	46	62
2:00	29	43	40	44	45	65	81	40	50
3:00	33	43	39	40	47	56	46	40	43
4:00	61	57	76	64	57	44	51	63	59
5:00	192	206	204	192	190	101	56	197	163
6:00	466	526	555	564	562	221	130	535	432
7:00	1104	858	1113	1032	1029	345	207	1027	813
8:00	1375	1349	1315	1312	1278	572	311	1326	1073
9:00	1141	1131	1176	1204	1125	679	494	1155	993
10:00	762	1095	1051	1079	1022	878	690	1002	940
11:00	1107	1097	1032	1014	1067	1081	886	1063	1041
12:00	1067	1071	1093	1049	639	1087	869	984	982
13:00	966	1034	1116	1031	1130	943	702	1055	989
14:00	991	1047	1025	1012	1063	966	782	1028	984
15:00	1065	1067	986	1077	1113	915	763	1062	998
16:00	1111	1097	1128	1175	1129	831	813	1128	1041
17:00	1098	1177	1256	1303	1188	774	719	1204	1074
18:00	881	957	1048	991	944	635	600	964	865
19:00	553	694	760	756	731	508	482	699	641
20:00	333	520	482	596	476	382	324	481	445
21:00	327	394	464	447	355	321	308	397	374
22:00	173	266	286	276	317	236	205	264	251
23:00	93	99	106	163	224	205	119	137	144
Total	15038	15921	16448	16564	15868	12086	9914	15968	14548
% Heavies	4.7%	4.7%	4.0%	4.1%	4.3%	4.4%	4.7%	4.3%	4.4%

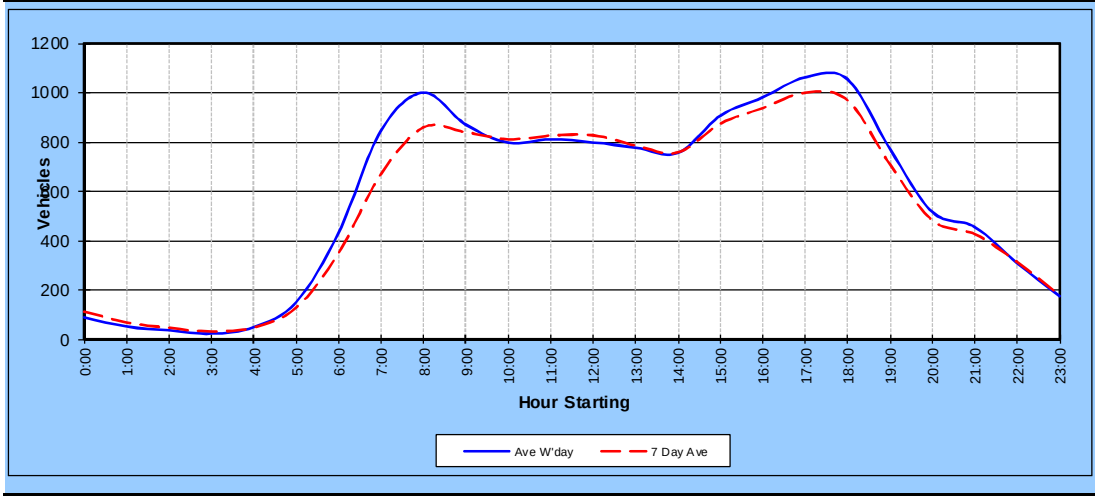


3.2.2 Site 2: 1 Cambridge Lane, Chatswood

Road	1 Cambridge Ln	
Location	Chatswood	
Site No.	0	
Start Date	Saturday	3-Dec-11
Direction	Combined	

Average Weekday	13715
7 Day Average	13050
Weekday Heavy's	7.5%
7 Day Heavy's	6.6%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Time	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	3-Dec	4-Dec	W'day	Ave
AM Peak	1009	1019	1020	996	954	895	829		
PM Peak	1087	980	1093	1196	1058	921	877		
0:00	85	84	71	92	115	161	178	89	112
1:00	36	36	53	61	73	109	115	52	69
2:00	26	35	35	38	47	72	76	36	47
3:00	24	20	24	21	27	64	45	23	32
4:00	41	38	59	51	57	49	44	49	48
5:00	151	153	163	127	161	87	57	151	128
6:00	432	439	451	423	420	188	101	433	351
7:00	850	868	849	860	807	299	163	847	671
8:00	1009	1019	1020	996	954	635	378	1000	859
9:00	873	899	844	911	822	872	655	870	839
10:00	744	781	838	823	800	884	807	797	811
11:00	729	762	833	866	862	895	829	810	825
12:00	700	800	861	770	860	921	877	798	827
13:00	719	784	761	827	793	911	704	777	786
14:00	818	778	741	654	786	834	688	755	757
15:00	895	877	911	903	946	839	750	906	874
16:00	940	949	1013	1015	987	837	819	981	937
17:00	1087	980	1093	1090	1058	876	815	1062	1000
18:00	1080	926	1048	1196	1018	870	641	1054	968
19:00	586	736	715	1088	729	648	456	771	708
20:00	463	479	514	662	459	421	375	515	482
21:00	409	441	445	555	426	382	326	455	426
22:00	216	310	336	328	353	367	283	309	313
23:00	119	137	151	201	264	263	113	174	178
Total	13032	13331	13829	14558	13824	12484	10295	13715	13050
% Heavies	8.1%	7.5%	7.5%	7.0%	7.6%	4.4%	3.1%	7.5%	6.6%

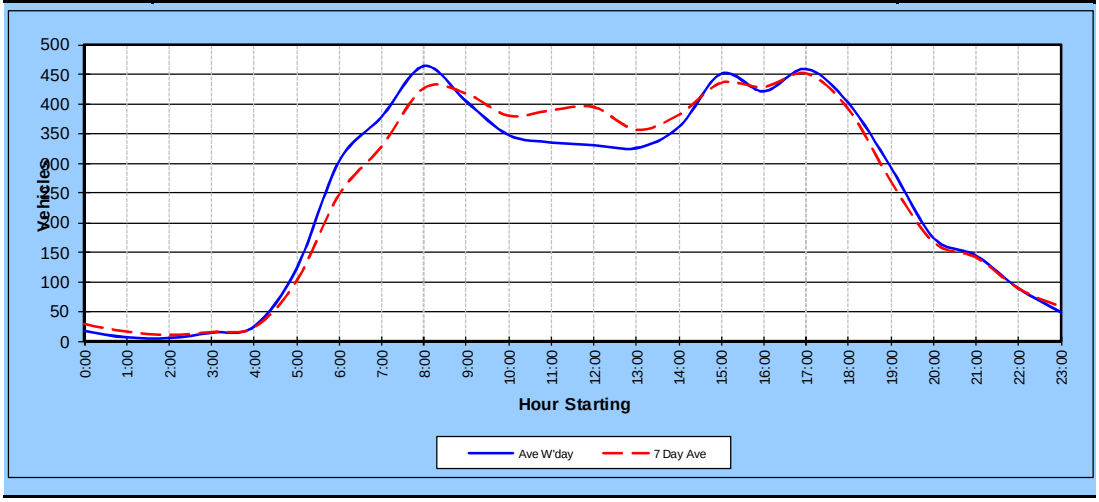


3.2.3 Site 3: 8-12 Waratah Street, Cronulla

Road	8-12 Waratah Street	
Location	Cronulla	
Site No.	6	
Start Date	Saturday	12-May-12
Direction	Combined	

Average Weekday	5915
7 Day Average	5941
Weekday Heavy's	2.5%
7 Day Heavy's	2.2%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Time	14-May	15-May	16-May	17-May	18-May	12-May	13-May	W'day	Ave
AM Peak	458	474	507	471	413	562	487		
PM Peak	470	478	445	476	500	526	583		
0:00	22	10	11	18	23	44	72	17	29
1:00	4	2	3	5	16	29	53	6	16
2:00	7	3	6	8	2	28	17	5	10
3:00	8	16	12	21	14	15	21	14	15
4:00	29	19	23	28	25	23	15	25	23
5:00	128	116	125	133	110	63	34	122	101
6:00	280	314	315	294	312	142	72	303	247
7:00	376	361	413	366	373	251	156	378	328
8:00	458	474	502	471	413	368	299	464	426
9:00	367	384	507	409	351	466	436	404	417
10:00	328	358	360	360	329	481	442	347	380
11:00	289	336	347	329	374	562	487	335	389
12:00	298	304	333	351	366	526	583	330	394
13:00	317	313	304	354	339	443	424	325	356
14:00	382	358	341	344	378	424	443	361	381
15:00	414	478	445	476	440	421	374	451	435
16:00	421	432	400	431	422	487	404	421	428
17:00	470	454	432	438	500	491	373	459	451
18:00	380	403	380	429	412	386	342	401	390
19:00	235	308	308	317	294	225	192	292	268
20:00	146	169	201	182	171	137	160	174	167
21:00	120	127	161	167	146	120	146	144	141
22:00	55	82	88	78	141	122	53	89	88
23:00	26	39	29	52	97	134	26	49	58
Total	5560	5860	6046	6061	6048	6388	5624	5915	5941
% Heavies	2.3%	2.5%	2.6%	2.5%	2.6%	1.7%	1.2%	2.5%	2.2%

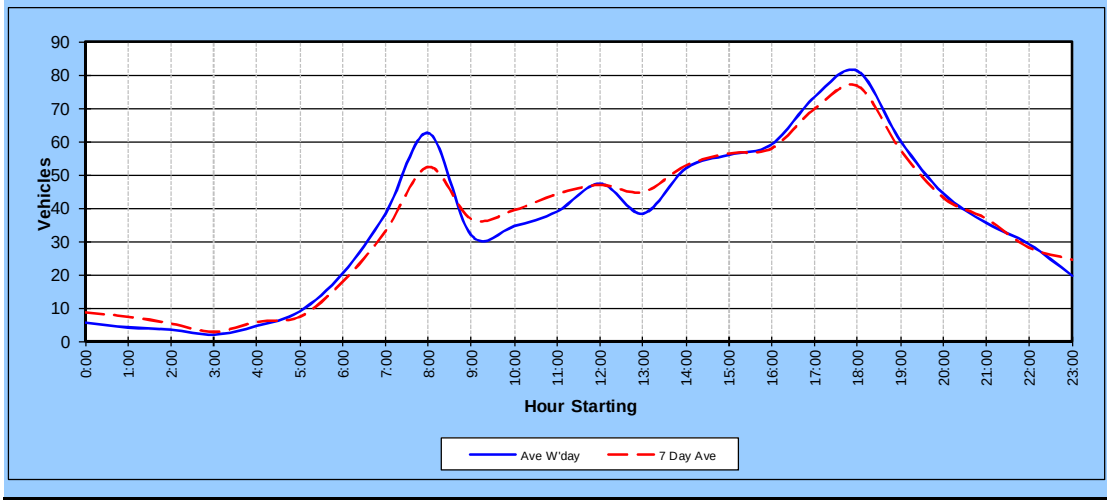


3.2.4 Site 4: 2-8 Ashton Street, Rockdale

Road	1 Ashton Street	
Location	Rockdale	
Site No.	1	
Start Date	Wednesday	22-Feb-12
Direction	Combined	

Average Weekday	853
7 Day Average	858
Weekday Heavy's	2.5%
7 Day Heavy's	2.7%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	27-Feb	28-Feb	22-Feb	23-Feb	24-Feb	25-Feb	26-Feb		
AM Peak	74	92	73	74	51	60	65		
PM Peak	82	94	78	85	83	69	66		
0:00	5	9	2	9	3	16	17	6	9
1:00	4	1	8	8	0	19	12	4	7
2:00	4	8	3	3	0	12	8	4	5
3:00	4	0	3	3	0	7	3	2	3
4:00	5	7	4	7	0	2	16	5	6
5:00	13	9	6	17	0	5	2	9	7
6:00	23	29	23	27	0	16	7	20	18
7:00	45	47	57	43	0	21	19	38	33
8:00	74	92	73	74	0	38	16	63	52
9:00	40	38	39	42	0	59	39	32	37
10:00	43	42	29	41	18	60	43	35	39
11:00	33	43	37	31	51	50	65	39	44
12:00	49	38	39	57	54	46	46	47	47
13:00	49	49	26	35	33	60	62	38	45
14:00	65	35	41	65	54	67	43	52	53
15:00	50	72	46	48	64	54	61	56	56
16:00	48	54	58	59	77	63	47	59	58
17:00	82	67	78	67	73	56	66	73	70
18:00	70	94	74	85	83	69	62	81	77
19:00	49	63	57	57	75	59	43	60	58
20:00	49	63	57	0	53	33	47	44	43
21:00	32	46	47	15	38	40	40	36	37
22:00	28	36	26	24	32	30	21	29	28
23:00	11	23	23	10	32	43	30	20	25
Total	875	965	856	827	740	925	815	853	858
% Heavies	3.4%	3.1%	1.9%	1.8%	2.2%	3.2%	3.4%	2.5%	2.7%

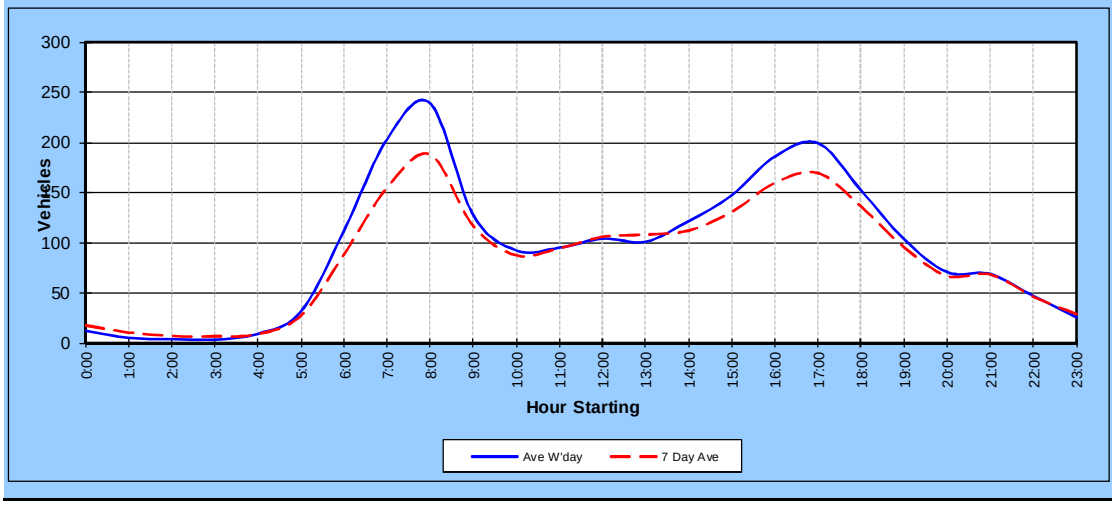


3.2.5 Site 5: 26-30 Hassall Street, Parramatta

Road	26-30 Hassall Street	
Location	Parramatta	
Site No.	4	
Start Date	Sunday	29-Apr-12
Direction	Combined	

Average Weekday	2259
7 Day Average	2033
Weekday Heavy's	2.8%
7 Day Heavy's	2.5%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	30-Apr	1-May	2-May	3-May	4-May	5-May	29-Apr		
AM Peak	252	249	259	226	209	81	113		
PM Peak	205	205	220	188	191	105	153		
0:00	20	13	8	13	7	30	32	12	18
1:00	4	2	3	7	10	20	27	5	10
2:00	2	2	3	5	6	17	13	4	7
3:00	5	3	2	1	6	14	16	3	7
4:00	11	10	11	7	7	5	10	9	9
5:00	31	34	33	31	27	19	15	31	27
6:00	117	127	101	114	100	39	20	112	88
7:00	187	212	238	209	170	42	25	203	155
8:00	252	249	259	226	209	60	60	239	188
9:00	123	129	105	137	143	81	99	127	117
10:00	76	99	98	99	89	80	70	92	87
11:00	98	88	117	71	101	72	113	95	94
12:00	83	91	109	109	128	94	126	104	106
13:00	85	92	116	104	108	98	153	101	108
14:00	118	121	120	118	130	83	94	121	112
15:00	126	152	131	162	165	101	77	147	131
16:00	178	187	209	164	191	102	86	186	160
17:00	205	205	220	188	178	88	102	199	169
18:00	123	162	170	155	151	105	86	152	136
19:00	80	111	123	84	119	85	67	103	96
20:00	56	68	81	76	72	54	60	71	67
21:00	45	63	84	80	72	74	60	69	68
22:00	38	41	39	41	75	49	40	47	46
23:00	23	27	20	15	42	49	26	25	29
Total	2086	2288	2400	2216	2306	1461	1477	2259	2033
% Heavies	2.9%	2.3%	2.7%	2.5%	3.8%	1.2%	1.2%	2.8%	2.5%

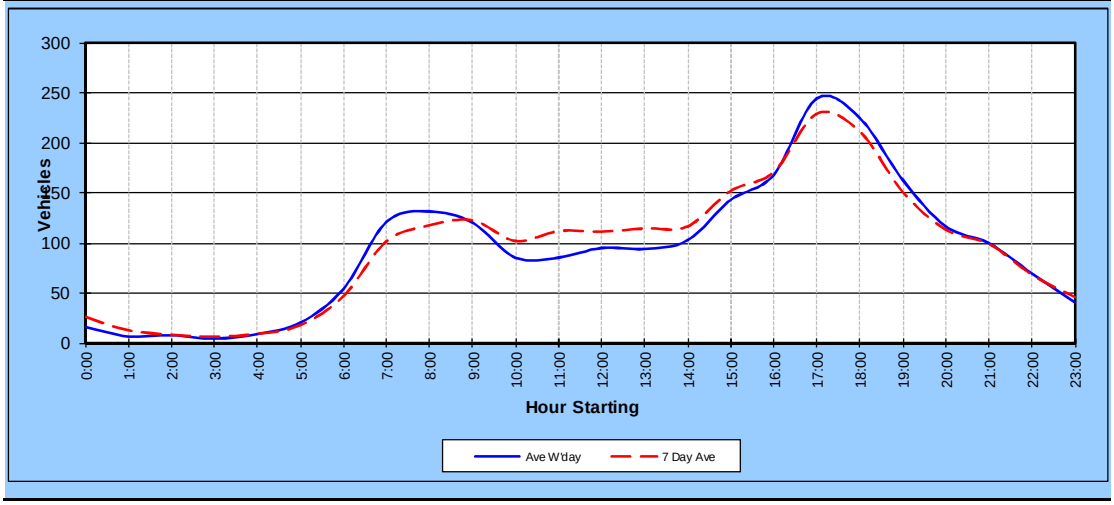


3.2.6 Site 5: 10 Wentworth Drive, Liberty Grove

Road	10 Wentw orth Drive	
Location	Liberty Grove	
Site No.	7	
Start Date	Sunday	13-May-12
Direction	Combined	

Average Weekday	2223
7 Day Average	2265
Weekday Heavy's	1.3%
7 Day Heavy's	1.0%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	14-May	15-May	16-May	17-May	18-May	19-May	13-May		
AM Peak	130	144	116	143	138	181	175		
PM Peak	192	236	252	232	312	219	173		
0:00	16	15	14	17	18	42	60	16	26
1:00	7	4	9	2	11	31	25	7	13
2:00	10	9	5	11	4	13	8	8	9
3:00	5	3	6	4	4	13	10	4	6
4:00	10	5	7	11	13	9	10	9	9
5:00	21	21	19	20	21	16	7	20	18
6:00	58	60	47	56	50	29	28	54	47
7:00	121	117	110	119	138	54	53	121	102
8:00	130	135	115	143	134	97	68	131	117
9:00	118	144	116	127	96	136	121	120	123
10:00	89	87	87	70	93	170	118	85	102
11:00	80	76	98	77	96	181	175	85	112
12:00	79	108	97	97	94	160	143	95	111
13:00	89	100	89	92	100	165	166	94	114
14:00	96	102	107	91	118	174	128	103	117
15:00	154	146	144	136	135	207	142	143	152
16:00	140	172	157	156	215	195	161	168	171
17:00	192	236	252	229	312	219	163	244	229
18:00	192	220	251	232	228	182	173	225	211
19:00	128	203	155	141	187	132	110	163	151
20:00	108	105	126	127	116	100	110	116	113
21:00	91	104	114	113	77	97	97	100	99
22:00	65	62	71	67	83	81	49	70	68
23:00	26	37	35	37	69	82	34	41	46
Total	2025	2271	2231	2175	2412	2585	2159	2223	2265
% Heavies	1.2%	1.5%	1.2%	1.4%	1.1%	0.6%	0.3%	1.3%	1.0%

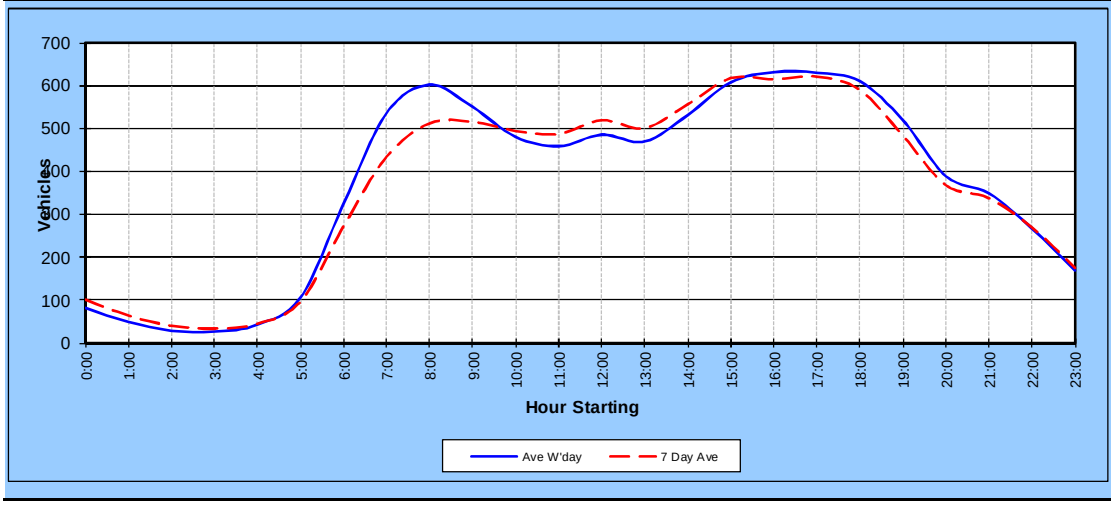


3.2.7 Site 7: 2 Everton Road, Strathfield

Road	1 Everton Road	
Location	Strathfield	
Site No.	3	
Start Date	Wednesday	14-Mar-12
Direction	Combined	

Average Weekday	8945
7 Day Average	8747
Weekday Heavy's	1.7%
7 Day Heavy's	1.5%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	19-Mar	20-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar		
AM Peak	634	565	584	603	624	618	499		
PM Peak	637	609	656	650	673	686	595		
0:00	60	71	80	97	101	125	173	82	101
1:00	56	40	41	42	66	99	106	49	64
2:00	25	25	30	26	39	63	74	29	40
3:00	24	25	28	30	27	47	55	27	34
4:00	45	36	36	47	50	57	44	43	45
5:00	114	100	116	99	100	87	60	106	97
6:00	327	333	323	336	300	178	105	324	272
7:00	522	543	551	521	542	227	132	536	434
8:00	634	565	584	603	624	364	210	602	512
9:00	506	561	522	579	583	501	357	550	516
10:00	474	461	448	526	492	595	462	480	494
11:00	425	426	454	469	520	618	499	459	487
12:00	479	512	461	487	489	649	556	486	519
13:00	451	444	431	473	548	636	523	469	501
14:00	510	544	521	525	556	652	586	531	556
15:00	637	586	602	611	602	686	595	608	617
16:00	607	609	618	650	673	574	568	631	614
17:00	635	609	620	644	641	643	553	630	621
18:00	602	561	656	604	627	600	479	610	590
19:00	456	455	500	532	654	415	371	519	483
20:00	303	359	354	472	457	321	310	389	368
21:00	263	342	326	441	372	330	290	349	338
22:00	217	258	237	270	354	308	243	267	270
23:00	136	145	154	160	253	239	140	170	175
Total	8508	8610	8693	9244	9670	9014	7491	8945	8747
% Heavies	1.8%	2.0%	1.4%	1.7%	1.6%	1.1%	0.9%	1.7%	1.5%

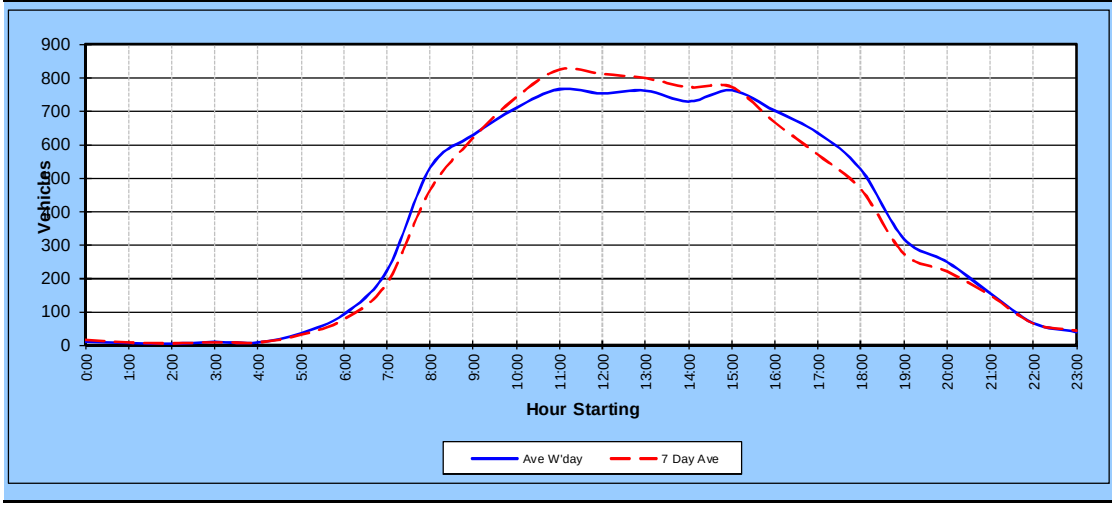


3.2.8 Site 8: 316 Charlestown Road, Charlestown

Road	5 Chapman Street	
Location	Charlestow n	
Site No.	5	
Start Date	Saturday	12-May-12
Direction	Combined	

Average Weekday	8702
7 Day Average	8581
Weekday Heavy's	3.8%
7 Day Heavy's	3.3%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	14-May	15-May	16-May	17-May	18-May	12-May	13-May		
AM Peak	705	689	764	773	894	1213	728		
PM Peak	708	732	762	1077	845	1124	793		
0:00	9	11	9	11	8	23	36	10	15
1:00	3	6	8	3	7	10	12	5	7
2:00	3	3	4	3	5	5	8	4	4
3:00	11	8	8	10	8	11	3	9	8
4:00	8	5	5	9	8	8	7	7	7
5:00	41	41	33	33	27	20	16	35	30
6:00	85	92	101	95	87	42	33	92	76
7:00	215	214	230	233	220	104	82	222	185
8:00	519	536	551	530	514	439	157	530	464
9:00	610	631	642	674	583	760	434	628	619
10:00	679	650	748	729	739	1031	612	709	741
11:00	705	689	764	773	894	1213	728	765	824
12:00	669	732	699	816	845	1119	793	752	810
13:00	703	701	729	831	841	1124	656	761	798
14:00	687	641	720	773	821	1069	686	728	771
15:00	708	713	762	785	841	939	653	762	772
16:00	617	624	623	896	742	684	473	700	666
17:00	525	558	523	987	577	516	298	634	569
18:00	310	356	368	1077	513	383	252	525	466
19:00	172	183	199	746	284	216	109	317	273
20:00	94	120	109	635	282	170	128	248	220
21:00	77	88	87	364	157	182	84	155	148
22:00	31	49	48	100	97	86	37	65	64
23:00	25	41	22	45	62	84	22	39	43
Total	7506	7692	7992	11158	9162	10238	6319	8702	8581
% Heavies	4.5%	4.0%	3.8%	3.3%	3.8%	2.3%	1.4%	3.8%	3.3%

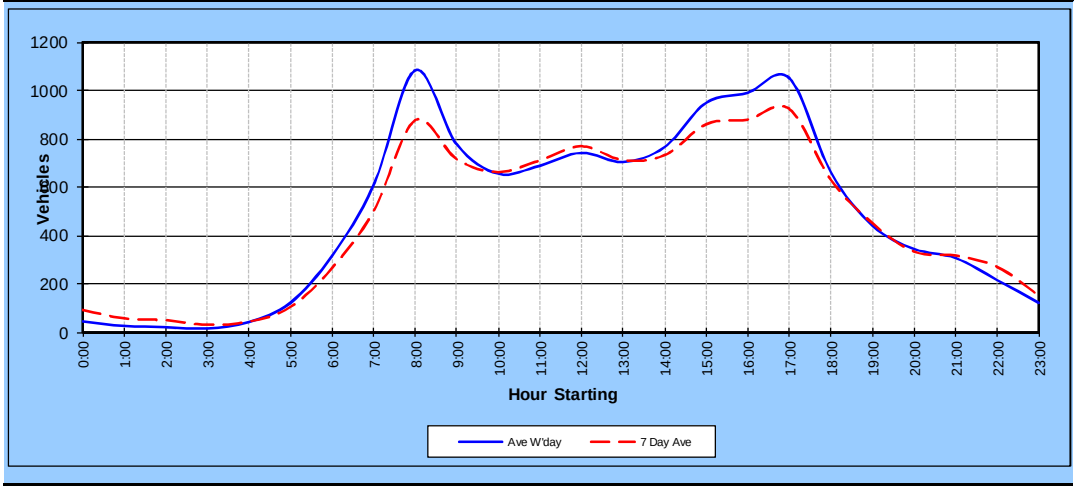


3.2.9 Site 9: 3-5 Corrimal Street, Wollongong

Road	3-5 Corrimal Street	
Location	Wollongong	
Site No.	8	
Start Date	Monday	28-May-12
Direction	Combined	

Average Weekday	11697
7 Day Average	11144
Weekday Heavy's	3.1%
7 Day Heavy's	2.6%

	Day of Week							Ave	7 Day
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	W'day	Ave
Time	28-May	29-May	30-May	31-May	1-Jun	2-Jun	3-Jun		
AM Peak	1045	1067	1103	1143	1056	840	690		
PM Peak	1014	1018	1094	1133	1018	868	805		
0:00	48	32	32	51	63	160	261	45	92
1:00	19	21	26	28	37	116	158	26	58
2:00	21	17	12	20	38	83	159	22	50
3:00	15	16	14	19	19	31	105	17	31
4:00	44	44	39	42	45	45	50	43	44
5:00	109	119	126	128	129	67	54	122	105
6:00	289	319	343	332	300	168	109	317	266
7:00	576	651	618	590	603	298	170	608	501
8:00	1045	1067	1103	1143	1056	490	234	1083	877
9:00	784	740	786	778	795	685	441	777	716
10:00	638	687	569	708	674	772	592	655	663
11:00	606	645	691	712	792	840	690	689	711
12:00	764	711	719	726	790	868	805	742	769
13:00	724	705	669	694	729	830	633	704	712
14:00	736	763	789	722	819	718	579	766	732
15:00	887	931	959	951	1018	704	573	949	860
16:00	979	960	1047	989	977	671	535	990	880
17:00	1014	1018	1094	1133	995	715	494	1051	923
18:00	584	666	632	680	746	707	396	662	630
19:00	397	373	454	473	504	633	319	440	450
20:00	282	293	349	402	398	333	279	345	334
21:00	247	274	281	341	391	459	226	307	317
22:00	134	156	193	241	358	632	182	216	271
23:00	67	86	112	102	245	381	75	122	153
Total	11009	11294	11657	12005	12521	11406	8119	11697	11144
% Heavies	3.0%	3.3%	3.1%	3.1%	2.9%	1.3%	1.1%	3.1%	2.6%

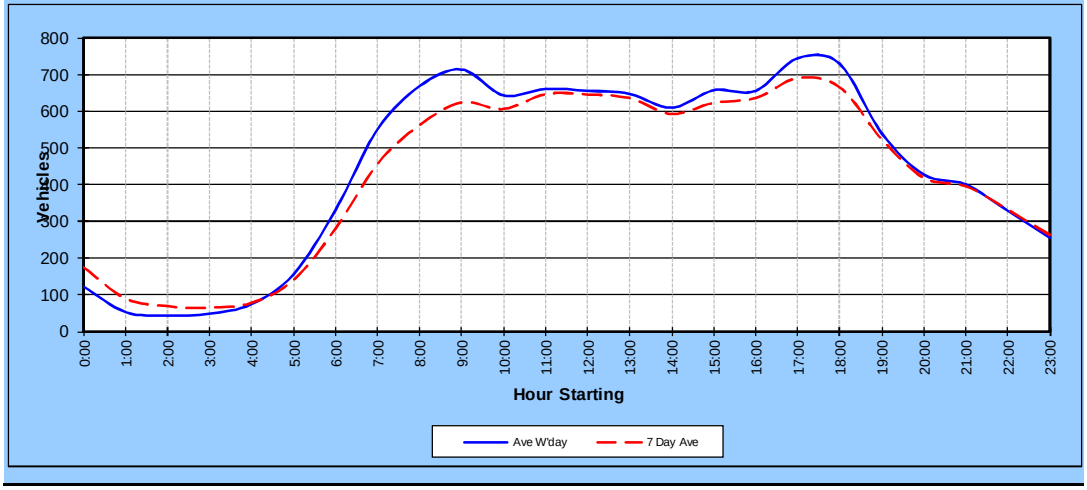


3.2.10 Site 10: 208 Harris Street, Pyrmont

Road	209 Harris Street	
Location	Pyrmont	
Site No.	9	
Start Date	Tuesday	17-Jul-12
Direction	Combined	

Average Weekday	10717
7 Day Average	10215
Weekday Heavy's	5.4%
7 Day Heavy's	4.9%

	Day of Week								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Ave	7 Day
Time	23-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	W'day	Ave
AM Peak	716	719	744	742	690	689	534		
PM Peak	738	727	737	793	774	666	580		
0:00	128	74	115	132	164	280	335	123	175
1:00	39	42	47	69	66	165	199	53	90
2:00	35	29	40	71	41	131	133	43	69
3:00	41	50	42	62	46	106	105	48	65
4:00	90	70	68	76	66	81	93	74	78
5:00	143	167	170	156	142	114	88	156	140
6:00	260	342	363	342	352	181	122	332	280
7:00	500	605	584	538	527	267	178	551	457
8:00	710	719	648	651	614	358	237	668	562
9:00	716	686	744	742	682	439	360	714	624
10:00	627	638	624	677	651	597	429	643	606
11:00	640	664	664	648	690	689	534	661	647
12:00	594	665	643	694	684	664	577	656	646
13:00	603	660	650	656	667	666	548	647	636
14:00	587	630	641	579	613	611	489	610	593
15:00	643	629	690	663	662	569	507	657	623
16:00	641	623	637	665	713	593	580	656	636
17:00	738	713	737	793	743	623	486	745	690
18:00	681	727	714	749	774	583	432	729	666
19:00	450	488	607	520	634	596	371	540	524
20:00	362	375	444	441	515	454	336	427	418
21:00	313	402	397	448	442	492	275	400	396
22:00	241	289	348	348	416	464	218	328	332
23:00	158	205	284	259	371	411	155	255	263
Total	9940	10492	10901	10979	11275	10134	7787	10717	10215
% Heavies	5.8%	5.9%	5.4%	5.0%	5.0%	3.5%	3.4%	5.4%	4.9%



Appendix A – Questionnaire Summary Sheets

Site 1: 13 Herbert Street, St Leonards

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____	1 = Yes 2 = No (if no, go to Question 8)	1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____		1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes	1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:								Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips				Primary modes of travel					Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm	
24	1	0	0	1	2				5				2					1		1		1	1
102	3	1	1	1 (studio)	3				5				1	1	7		2	2	2	2		2	NA
101	3	0	1	2	2	4			3	5			2				3		3			1	NA
100	1	1	0	1	2				1				2				1		2	1		1	1
99	2	1	1	1	2	2			1	2			2			1		1	1	1			NA
97	1	0	1	1	1				5				2					1	1			1	1
96	2	1	1	1	2	2			1	2			2				2		2			2	5
95	2	0	0	1	2				5				2				1		1			1	2
94	3	2	2	3	2	4			1	5			2					3			3	1	5
93	4	0	2	3	6				5				2					3	3			1	1
92	2	0	0	1	2				5				2				1		1			1	5
91	2	1	1	2	1				5				2						2			1	4
89	1	0	0	1	1				7				2				1		2		1		1
90	1	0	0	1	1	1			5	7			2				1		1			1	2
85	1	0	0	1	1	1	1		5	6	7		2					1				1	5
88	3	1	1	3	1	1			1	5			2				1		1			1	1
98	2	1	1	1	2				5				2			1			1			1	5
86	2	1	0	1	1	1	2		1	2	5		2				2			2		1	5
81	1	0	0	1	2	2	2		5	6	7		1	1,1	1,2		1	2	2	1	1	1	3
82	1			1	1				5				2				1					1	5
83	2	1	1	2	2	2			5	7			2				1		1			1	2
78	2	2	1	0	1	1	1	1	1	5	6	7	2					2		1	1	1	3
77	2	1	1	1	2				5				2				2			2		1	1
84	3	1	1	2	4				7				2				2	2				1	1
57	1	0	1	1	2				5				1	1,1	1,2		3				3	1	5
44	1	0	0	1	1				7				1	1,1	1,2				1			2	3
56	1	1	1	1	1				5				2				1				1	1	5
41	1	0	0	1	1	1	1		5	6	7		2						2			2	3
47	1	1	1	1	1				1				1	2	1	1			1			1	3
111	2	1	1	2	1	1			1	5			1	1	1		1		1			1	NA
110	1	0	0	1 (studio)	1				7				2						2			1	1
109	2	0	0	1 (studio)	1				6				2						2			1	1
108	2	1	2	3	2 (today)				5				2					1				1	1
104	3	1	1	2	10 (per week)				5				2						1			2	4
103	1	0	0	1	10 (per week)				5				2					1				2	5
107	1	0	0	1	10 (per week)				6				2					1				1	1
105	1	1	0	1	(to and from work)				1				1	1	1		1			1 (last night		1	Not answered
106	3	2	2	3	20	10 (per week)			5	7			2					1	1			1	5

Site 2: 1 Cambridge Street, Chatswood

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____	1 = Yes 2 = No (if no, go to Question 8)	1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____		1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes	1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:								Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)						Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips				Primary modes of travel					Number			Visitor travel mode			Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
78	2	1	1	2	1	1			1	2			2								1					1	5 (10 hours)
79	3	2	2	3									2								1					1	
80	3	1	2	3	1	2			1	7			2								2					1	3
81	1	0	0	1					5				1	2			5				1			1		1	
83	2	1	1	7					1	5	7		1				5	7			1			1		1	5
85	3	2	2	3	2	1			1	5			2								2			1	1	1	
88	3	1	1	3	2				5				2								1					3	4
89	4	2	2	3	2	1	1		1	5	7		2								2					1	4
90	3	1	2	3	1	2			5	7			2								1		1		1	1	2
91	3	2	2	3	2	1			1	7			1	1			1				2	2		1	1	1	1
92	2	1	1	2	1	1			1	7			2								1		1			1	1
93	2	1	1	2	1	1			1	7			2								1		1			1	1
94	5	2	2	3	2	1			1	5			2								1		1	1		3	3
95	3	1	2	3	1	2			1	7			2										3		3		2
96	3	1	1	3	1	1	1		1	2	6		2								3		1		2	1	
97	2	1	1	1	1	1			1	5			2							1	1		1			1	5
99	2	1	1	1	1	1			1	7			2								2		2				1
98	4	2	1	3	2	1	1	1	1	2	5	6	2								2			2	2	1	
100	2	1	1	2	2	2			1	7			1	1			7					2	2	2			2
176	4	3	3	3	4	4			5	7			2								1		1	1	1	1	
104	2	1	1	2	4				7				2									1	2	1		2	3 (Because Mirvac blocked the pedestrian road, need to cross 4 traffic lights instead of 1)
112	2	1	2	3	1				7				2										1				3
2	4	1	1	3	2	2			5	7			1	1	1		1	7			2	1	1			1	2
82	2	0	0	1	8				7				2								2	1	2	1	2		1
136	2	2	2	2	4	2			1	7			2								4			2		1	
1	2	1	2	3	2	2			1	2			1	1	2	3	1	6	7			2		2	3	1	1
42	4	2	2	3	2	8	8		1	5	7		2				1	5				2	4	2	2	2	5
46	3	1	1	3					1				2									1				1	3
12	2	0	0	1	2				5				2								2	3	3	2		1	1
4	5	2	1	2	2	2	2		1	2	7			2			1	2	5		1	2	2			2	
29	3	1	1	1					1	5							5	6			1					2	2
6	2	1	1	2	1	1	1	1	1	2	5	7	2								2			2		1	
36	4	1	1	3	4				5				2													1	2

Site 3: 8-12 Waratah Street, Cronulla

Answer Key									
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:		Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips	Primary modes of travel		Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
26	2	5	8	3		6,7		3	1,2							4,5	5 (more to hospital)
28	3	3	2	3	4,2	1,7	2			2	1	1	1	1			
171	1	1	2	3	2,1	1,6	1	1,1,1	1,2,7			2	1			3	
5	2	2	1	2	2,2	1,7	1	1,1	1,2			1	2	1		5	
154	1	0	2	3			2				1		1			3	3
177	2	1	1	2						1		3				1	2
8	2	1	1	3	2,2,3	1,5,7	1	1,4	1,2	1							
4	2	1	1	2	1,1,4	1,2,7	1	1	7	2		2	2				5
169	2	1	2	3	1,1	1,2	2				1					1	1
21	1	1	1	2	1,1	1,7										2	4
22	2	1	2	2	3,5	1,7						1				2	2
23	2	2	2	3	4,7	1,7										1	3
24	2	1	2	2	1,1	1,7										1	3
25	1	1	1	2	3 (per week)	7						1				2	4
175	1	1	1	2		7	2		7		1	1				2	2
2	1	0	2	2	1	2	1	5,2	1,2			1				1,3,5	1,3,5
168	2	2	2	3	2	7	1	1	1	2	1		1				3

Site 4: 2-8 Ashton Street, Rockdale

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:										Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
				Number of trips					Primary modes of travel						Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
2	1	1	2	1					7					2						1				1
1	0	1	2	1					7					2						1				
3	2	1	2	2	1				1	2				1		1,2		1			1		4	5
3	2	1	2	2	2	4	4		1	4	5	7		2				3	1	1	3		3	3
4	2	1	2	1	1				5	6				2		1,6					1		3	5
6	2	1	2	2					5					2								2	3	5
2	1	1	2						7					2									1	2
4	2	1	2						5					1		7						2	3	5
2	1	1	2	2					2					2					2				3	1
2	2	1	2	2	3				1	5				2				1					3	3
3	1	1	3	2					5					2						2			3	5
1	1	1	2	3 to 4					1					2			3						3	5
3	1	1	2	2 (bus)					5	6				2				2					3	4
3	1	1	2	2					1					2			2							
4	1	1	2	2 to 3					1	5				2						2				4
3	2	1	2	2 to 3					1					2				2						
5	1	1	2						1	2	5	6	7	1		1,2	1		1			1	4	4
2	6	0	2						7					2		5				1			1	2
4	Doesn't know	Doesn't know	2	4					2	5	6			2	2	5				1			2	1
4	Doesn't know	Doesn't know	2						1	5	6	7				5		2					2	
4	1	1	2						1	5	6			2		1,2,5,6		1			1	1	3	5
4	1	2	3	1	2	2			1	5	6			1		1,2,5,6						4	5	5
3	1	1	2	2	2				5	6				2	1,2,2	1,5,6						3	5	5
5	4	2	3	1	1	3	2		1	2	5	7		2	1,1,1	1,5,6					1	1	5	5
2	1	1	2	1	2	2			1	5	7			2	1,2,2	1,5,6					1	2	5	5
4	2	1	3	1	2	2			1	5	7			2	1,1,1,2	1,5,6,7				1		1	1	5
2	1	1	2	2	2				1	7				2					2	2			1	2
4	1	3	3	2	2	6	7	7	1	2	5	6	7	2						2			1	1
4	1	1	2	2	6	1	2		1	2	5	7		2				5		5	1		4	1
3	2	2	2	2					5	6				2						1		1	1	1
4	2	1	2	1	2	1	1	3	1	2	5	6	7	2			1	1		1	1		3	5
4	2	1	3	2					6					1	2	6				2		3	2	2
4	2	2	2	1	1	1	1		2	3	5	6		1	1,1,1,1	1,2,5,6				2		2	5	2
4	1	2	2	1	1	2	1		1	2	5	7		1	1,1	1,2				2	2		5	4
5	1	2	3	1	1	2	2		1	2	5	6		1	1,1,1,1	1,2,5,6				3		3	5	4
4	2	1	2	2	1	1			1	5	6			2					2			2	5	3
2	1	1	2	1	1	1	1		1	2	5	7		2			1			1	1		3	5
1	1	1	2	1					1					1		1,7		1		1	1		1	5
3	1	1	2	3	2	2			1	2	7			1	1	2		1		2		1	1	4
2	1	2	2	1	1				3	6				2						1		1	1	1
3	2	1	2	1	1	1			1	2	3			1	2	5				3	2		2	1
2	2	2	2	1					3					2						1			1	1
4	2	2	2	2					5					1	1	5				1		1	1	1

Site 5: 26-30 Hassall Street, Parramatta

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:						Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips			Primary modes of travel				Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm	
84	1	1	1	2	1			1			2						1			2	5
145	2	0	1	2	1	1		5	7		2					1	1	1		1	5
146	2	0	1	2	1			7			2							1		5	4
147	3	1	1	2	4			7			2					1	2	1		3,5	5
148	2	0	1	2	1	1		6	7		2					1				1	5
149	2	0	0	1	2	2		5	7		2			2			2			1	5
150	2	1	1	3	2			7			2						1	1		2	2
151	2	0	0	1	2	2 (day)		5	7		2					1	1			1	5
152	4	1	1	3	1	3	1	1	5	6	2			1	2		1			1	NA
2	2		1	2	1	1		1	6		2				1	1				2	4,5
18	4	0		1				7												2	5
25	3	1	1	2	2	2		1	2	5	2				2			2		1	2
27	3	1	1	2				1	5	6	2									1	5
40	2	1	1	2				1	5		2				4					1	5
155	3	1	1	3	1	1		1	7		2						2	2		1	1
97	2	2	1	2	1	1		6	7		2					2		2		2	2
87	2	0		2	2			6			2				2			2		1	5
93	5	2	2	3	2			7			2					1	1			2	5
86	2	1	1	2	4			1			2				2			2		1	5
88	2	1	1	2	2			5			2				7			1		1	5
89	2	1	1	2	1	1		5	7		2				2		7	1		1	3
90	2			2	1	1		6	7		2				1	1		2		1	3,4
94	2	1	1	2	1	1		1	7		2				1	1	2			1	1
91	4	2	1	3	3			1			2				2	1	2		1	1	1
85	1	1	1	2	2			5			2				1			1		1	5
92	4			3	2			5			2				7			1		2	5
96	4	1	1	3	2			5			2					1	1			1	5
95	4	1	1	5	2	2		1	7		1		5	1			1			1	5
156	4	1	2	3	2	2		1	5		2				2		1	1		1	5
98	5	1	1	3	2	2	2 (daily)	1	5	7	2			1				1		1	1

Site 6: 10 Wentworth Drive, Liberty Grove

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:					Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips		Primary modes of travel				Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
142	2	1	2	2	1	1	1	2		2						1			1	1
212	2	1	1	2	1	1	1	5		2			2			1	1		3	NA
16	1	1	2	3	1		1			2						1				1
220	4	1	2	3	2	2	1	7		2				1	2		1			2
239	3		1	2			7			1									1	1
238	5			3			5			2									2	5
237	3	2	2	3			1			1		1							1	1
236	6	1	2	4			2			2									5	
235	3	1		2			1			2									3	3
232	4	2	1	3			1	2		2									2	3
231	2	1	1	2			1			2									2	3
230	4	2	2	1			1	7		2									3	4
229	4	2	2	3			1	5	7	2									3	3
228	4	1	1	2			1	7		2									3	4
227	3	2	1	2			1			2									3	2
225	3	1	1	2			1			2									3	
226	4	2	1	3			1			2									2	
245	2	1	1	2			5			2									2	4
30	2	2	1	2			5			2									4	3
37	4	3	2	3			1			1		1							5	5
36	4	1	1	2			1			1		7							3	4
38	2	1	1	2			5			1		1							5	5
31	4	1	2	3			5			1	2	1							3	5
32	2	2	1	2			1			2									5	5
33	5	2	2	3			3			2									5	5
35	4	2	2	3			1	2		1		1,2							3	5
29	4	3	2	3			1	2		2									3	
180	2	1	1	2			1			2										
27	3	0	0	2			7			2									2	4
151	3	2	2	3			1	5		2									2	2
152	4	1	2	3			1			2					1				3	4
143	5		1	2	2		1			2				2			1		2	3
14	2	1	1	2	4	2	1	2		2				2	2					

Site 7: 2 Everton Road, Strathfield

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:						Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips			Primary modes of travel				Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
103	1	1	31	2	1	1		1	2		2									1	1
104	3	1		2	1	1	1	1	2	5	2				1					1	5
132	1	1	1	2	2			1			2				1			1		1	4
133	2	1	1	2	14			1			2					1	1				3
134	1	1	1	2	3	3		1	5		2					1	1			1	5
135	4	0	1	2	14	14		5	6		2			4			4			1	5
136	4	0	1	2	14			5			2				4		4			2	5
137	4	1	1	2	14			5			2				1			1		1	3
138	4	0	1	2	14	14		5	6		2			3				3		1	5
139	4	0	1	2	1 (per month)	7		1	5		2			1	3		3	1		1	2
140	4	0	1	2	14	14		5	6		2				1			1		1	3
159	3		1	2	12 (per week)			5			2				3			3		1	5
161	2			2	2			7			2					2		2		1	2
163	2		1	2	2			5								1		1		1	2
164	2	1	1	2	2			5			2					1		1		1	5
165	2	1	1	2	2			1			2				1			1		1	3
107	1	1	1	2	1	1		1	5		2			1		1				1	
141	2	2	1	2	7	7 (weekly)		1	5		2				1			1		1	NA
142	2	1	1	2	14			1			2							2		NA	5

Site 8: 136 Charlestown Road, Charlestown

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____	1 = Yes 2 = No (if no, go to Question 8)	1 = Car (driver) 2 = Car (Passenger) 3 = Cycle 4 = Motorcycle 5 = Train 6 = Bus 7 = Walk 9 = Other (specify) _____		1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes	1 = 0 - 5 minutes 2 = 6 - 10 minutes 3 = 11 - 15 minutes 4 = 16 - 30 minutes 5 = More than 30 minutes

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:						Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)					Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips			Primary modes of travel				Number		Visitor travel mode			Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
61	3	3	1	2	6	2	2	1	2	7	1	2		1			1	2		3	1	1		1
120	2	2	1	2				1	4	7	2												5	5
97	1	1	2	3	2			1	2	7		3		1	2	7		1	1	1	1		2	
116	3	1	1	2	1	1	1	1	6	7	2						2		1	1			3,4	
186	3	1	2	2	1	1		1	7		1			7					1	1				2
185	1	1	1	2				1	7		2										1		2	1
184	2	1	1	2				1			2							1			1			2
191	2	1	2	2				1			2													1
192	1	1	2	2				1			1			7									2	2
181	2	2	2	2				1	7		2												1	2
193	1	1	1	2	1			7			2								1					2
183	2	2	2	2	1			1	7		2							1		1				2
182	3	2	2	2				1			2							1		1			1	2
67	2	1	2	3	2	2		1	7		2										1			
187	3	1	1	2	2			1			2						1				1		1	
189	3	1	1	1				1			2						1					1	1	5
188	4	2	1	2				1			1			1				1			1		1	5
24	1	1	1	2	14			1			2						1				1	1	1	5
30	2	2	1	2	4	20		1	7		2	2	2	1	2		1	2			2	1	1	1-2
242	2	1	2	2				1	7		2								1		1		1	1
245	2	2	2	2	1			1			2							1					2	2
246	2	2	2	2	1	1		1	7		2								1	1 (walk)			1	1
243	2	1	2	3	1			1			1	2	4	1	2			1	6				1	2
247	1	0	1	1	0			6			2							1			1		1	5
200	2	2	2	2	2			1			2								1					2
199	2	1	2	2	1	1		1	7		2							1		1			1	1
198	3	2	2	2	2	1		1	7		1	1		1					2	2			1	2
197	2	1	2	2	2	3		1	7		2								2	3			2	2
196	2	2	2	2	1	2		1	7		2								1	2			1	1
195	2	1	2	2	1	2		1	7		2								1	1			1	2
194	4	1	2	3				1	7		1			1					1	1			1	1
190	3	1	1	2	1			1			1			5				2					1	
244	4	2	2	2	2			1			2						1							
249	3	1	1	2	1			1			2							1					1	1
241	3	3	2	3	3			1			2								1	2			1	1
250	2	1	2	3	1	1		1	7		1	1		1				1	1	1			1	1
201	1	1	1	2	1			1			1			1									1	2
240	3	1	1	2	1			5			2							1					4	
248	2	2	1	2	1	1		1	7		1			6					1	1			1	1

Site 9: 3-5 Corrimal Street, Wollongong

Answer Key									
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minutes	5 = More than 30 minutes
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either on-site or nearby on-street?	Q3 - How many on-site parking spaces does your unit have allocated?	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of trips made by all residents of your unit, and the primary modes of travel:		Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors travelled to your unit (indicate number if more than one)		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your unit today, what was the duration of the walk?	Q10 - If you walked directly between your unit and your final destination (e.g. work, school, uni, etc) today, what was the duration of the walk?
					Number of trips	Primary modes of travel		Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
109	3	2	2	3		1	2									1	2
107	3	2	2	3		1	2		1,7		1		1			1	
108	2	2	2	3		1,7	1		1,7							1	2
52	2	2	2	3	1	1	2			0	0	0	1	0	0		
101	2	2	2	4	2,1,4	1,2,7	2			1	1	1	1	1	1	1	4
57	4	3	2	4	3,1	1,6	2			1	2	3	3	2	1		
54	2	2	2	4	6,2,6	1,2,7	2	1	1	2	2		1	1			

Site 10: 208 Harris Street, Pyrmont

Answer Key

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
				1 = Car (driver)	1 = Yes	1 = Car (driver)		1 = 0 - 5 minutes	1 = 0 - 5 minutes
				2 = Car (Passenger)	2 = No (if no, go to Question 8)	2 = Car (Passenger)		2 = 6 - 10 minutes	2 = 6 - 10 minutes
				3 = Cycle		3 = Cycle		3 = 11 - 15 minutes	3 = 11 - 15 minutes
				4 = Motorcycle		4 = Motorcycle		4 = 16 - 30 minutes	4 = 16 - 30 minutes
				5 = Train		5 = Train		5 = More than 30 minu	5 = More than 30 minu
				6 = Bus		6 = Bus			
				7 = Walk		7 = Walk			
				9 = Other (specify) _____		9 = Other (specify) _____			

Serial Number	Q1 - How many people are currently living in your unit?	Q2 - How many cars do these residents have parked either	Q3 - How many on-site parking spaces does your unit have	Q4 - How many bedroom are in your unit?	Q5 - Please indicate the total number of		Q6 - Did you have visitors to your unit today?	Q7 - Please indicate how visitors		Q8 - Please indicate the number of trips by any mode made today to or from your unit (by residents as well as visitors)						Q9 - If you walked between public transport and your	Q10 - If you walked directly between your unit and your
					Number of trips	Primary modes of travel		Number	Visitor travel mode	Before 7am	7am-9am	9am-12noon	12noon-5pm	5pm-7pm	After 7pm		
156	4	1	1	2	1,3	5,7	2				1		1	1		3	5
155	2	1	1	2	2,1	5,7	2					1	4			3	2
153	2	0	0	1	1	1	1	1	1			1	1			4	3
152	1	1	1	1	1	1	2							1		1	3
151	2	0	1	1	1,2	1,7	1	1	1							4	3
150	4	1	1	2	1,3	5,7	2					4	1			5	5
149	3	0	1	2	2	6	2						1			1	4
148	3	0	1	2	6	6	2						3			1	5
147	2	1	1	1	2,2	1,7	2						1	1		1,3	5
146	4	0	1	2	1,1	2,7	2				1		1			1	5
145	2	0	1	1	1,2	6,7	2						2			5	5
144	6	2	2	3	2	2	2						1			3	4
143	4	0	0	2	1,4	3,5,7	1		3,5,7		1	4				4	2
142	2	0	1	1	1	7	2					6				1	3
141	2	0	0	2	2,1	3,7	2				2		1			1	3
139	2	1	1	2	2,2	1,7	2					1	2				3
138	1	0	1	1	5	7	2					2	3	1		1	3
137	2	1	1	2	1,1	1,3	2					2				1	
136	1	0	1	1		1,2,3,5,6,7	2			2			4	2	2	2	1
135	2	0	1	1			2						1		1	NA	1
134	4	1	1	2	2,1,5,5,4	1,2,5,6,7	1	1	1				2			1	3
133	4	0	1	3	1,1,1,1	3,5,6,7	1		3,5,6,7		1	1	2	1	1	1,4	4
175	2	0	1	1	15,4,10	5,6,7	1		5			2				2	
174	5	1	1	1	2,2,8,4,18	1,2,5,6,7	2					1				1	
173	2	1	1	1	2,2,2,2,8	1,2,5,6,7	1		5			1				1	3
172	4	1	1	2	2,2,2,1,4	1,2,5,6,7						1				3	
171	3	1	1	2	2,2,10,5,10	1,2,5,6,7	2					1				1	
170	2	1	1	1	2,1,2,15	1,2,5,7	2				1						4
169	2	1	1	1	2,2,2,2,8	1,2,5,6,7	2				3					NA	1
168	4	0	1	2	1	5,7	2				2					3	
167	3	1	1	2	3,1,12,4,8	1,2,5,6,7	2					1				1	
166	1	1	1	1	2,10,4,8	1,5,6,7	1		9-Taxi/Cab			2					3
165	2	1	1	1	5,4	1,7	2					1				1	
164	2	1	1	2	4,2,10,5,15+	1,2,5,6,7	2					3				1	3
163	1	1	1	1	5,3,10	1,5,7	1		5			2				3	
162	2	1	1	1	4,3,5,5,8	1,2,5,6,7	2					2				1	
132	1	1	1	1	1,10,4	1,5,7	1	1	7			4	1			1	1
25	2	1	1	1	(per week), 2(per day	1,7	2						1	1		1	5
81	1	0	1	1	1,3	6,7	2					1	1	1		1	3
90	2	1	1	1	1,2	1,7	2			1	1				2		3,4
104	2	1	1	2	1,2,1,4	1,2,6,7	2	1	1		1	2	4	2	1	2	4
163	2	1	1	1	2,1	1,7	2				1	1	2			1,3	3
162	2	1	0	2	2,1,4	1,6,7	1		1			1	4			1	3
161	2	1	1	1	per week), 1, 2(per we	1,6,7	2						1	1		1	5
160	2	1	1	2	1,1,2	1,2,7	2				1	2	4	1		3	4
159	2	1	1	1	1,1,1	1,5,7	2				2	1	4			3	3
158	3	0	1	2	1,3	6,7	2				1	2	2	1		3	4
157	1	0	1	1	1	7	2									3	

Appendix B – NZ TDB Site Survey Sheets

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Thursday**	**8-Mar-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		13 Herbert Street, St Leonards			
Land Use Description		High Density Residential Development			
Territorial Local Authority		Willoughby City Council			
Street Address & Suburb		13 Herbert Street, St Leonards			
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ■	Collector ☐	Local ☐
		Traffic ADT = 14,548		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		80 units			

B. PARKING

Parking Spaces Provided On-Site	97 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0600 - 0615 hrs	60 spaces	
Peak Parking Demand During Survey		0.75 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0745 hrs	0845 hrs		
		IN	2	13 (in + out)		
		OUT	11			
	PM Peak (veh/hr)	TIME	1615 hrs	1715 hrs		
		IN	4	7 (in + out)		
		OUT	3			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	54 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.16 vph	/unit		
		PM Hr	0.09 vph	/unit		
		DAILY	0.68 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	54	22%
Car Passengers	11	5%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	179	73%
Cyclists	-	-
Bus Passengers	-	-
Total	244	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Saturday**	**10-Mar-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA						
Activity Name		13 Herbert Street, St Leonards			
Land Use Description		High Density Residential Development			
Territorial Local Authority		Willoughby City Council			
Street Address & Suburb		13 Herbert Street, St Leonards			
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐
		Traffic ADT = 14,548		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		80 units			

B. PARKING			
Parking Spaces Provided On-Site	97 spaces		
Other Parking Spaces Available On-Street Off-Site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0800 - 0815 hrs	54 spaces	
Peak Parking Demand During Survey		0.68 spaces /unit	

C. TRIP GENERATION						
SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
		IN	3	12 vph (in+out)		
		OUT	9			
	PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs		
		IN	5	14 vph (in+out)		
		OUT	9			
	Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
		TOTAL IN+OUT	132 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.15 vph	/unit		
		PM Hr	0.18 vph	/unit		
		DAILY	1.65 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	130	18%
Car Passengers	88	12%
Goods Drivers	2	0%
Goods Passengers	0	0%
Pedestrians	494	69%
Cyclists	-	-
Bus Passengers	-	-
Total	714	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**6-Dec-11**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		1 Cambridge Lane, Chatswood			
Land Use Description		High Density Residential Development			
Territorial Local Authority		Willoughby City Council			
Street Address & Suburb		1 Cambridge Lane, Chatswood			
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐
		Traffic ADT = 13,050		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		132 units			

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	206 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	1830 - 1845 hrs	127	
Peak Parking Demand During Survey		0.96 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW						
AM Peak (veh/hr)	TIME	0730 hrs	0830 hrs		
	IN	5	19 vph (in+out)		
	OUT	14			
PM Peak (veh/hr)	TIME	1630 hrs	1730 hrs		
	IN	12	17 vph (in+out)		
	OUT	5			
Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
	TOTAL IN+OUT	159 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)	AM Hr	0.14 vph	/unit		
	PM Hr	0.13 vph	/unit		
	DAILY	1.2 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	159	23%
Car Passengers	86	12%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	445	64%
Cyclists	-	-
Bus Passengers	-	-
Total	690	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Saturday**	**3-Dec-11**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A.	Activity Name		1 Cambridge Lane, Chatswood				
	Land Use Description		High Density Residential Development				
	Territorial Local Authority		Willoughby City Council				
	Street Address & Suburb		1 Cambridge Lane, Chatswood				
SITE DATA	Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐	
	Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐	
			Traffic ADT = 13,050		SH/TLA/Other Rd (State)		
	Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐	
	Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐	
	Occupied Site Area (Ha or m^2)		Nil				
	Gross Floor Area (GFA m^2)		Nil				
	Employees		Nil				
	Other Size (please specify value and units eg seats, rooms, beds, pupils)		132 units				

B.	Parking Spaces Provided On-Site (Inc. Staff)	206 spaces			
	Other Parking Spaces Available On-Street Off-site	n/a			
PARKING	Staff Parking Spaces Provided On-Site	n/a			■ Not Relevant
	Staff Parking Spaces On-Street and Off-site	n/a			■ Not Surveyed ☐ Estimated
	Peak Parking Demand	0600 - 0615 hrs	119		
	Peak Parking Demand During Survey		0.9 spaces /unit		

C.	SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
			IN	0	14 vph (in+out)		
			OUT	14			
		PM Peak (veh/hr)	TIME	1600 hrs	1700 hrs		
			IN	9	19 vph (in+out)		
			OUT	10			
		Daily (veh/hr)	TIME	0600 hrs	1800 hrs		
			TOTAL IN+OUT	182			
TRIP GENERATION	Peak Trip Rate per 100m^2 or other unit (state)		AM Hr	0.11 vph	/unit		
			PM Hr	0.14 vph	/unit		
			DAILY	1.38 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	173	22%
Car Passengers	103	13%
Goods Drivers	9	1%
Goods Passengers	3	0%
Pedestrians	501	63%
Cyclists	-	-
Bus Passengers	-	-
Total	789	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**15-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name			8-12 Waratah Street, Cronulla					
Land Use Description			High Density Residential Development					
Territorial Local Authority			Sutherland Shire Council					
Street Address & Suburb			8-12 Waratah Street, Cronulla					
Survey Site General Location			Rural ☐	Suburb ■	Inner ☐	CBD ☐		
Highest Classification of Frontage Roads			Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐		
			Traffic ADT =	5,941	SH/TLA/Other Rd (State)			
Pedestrian Activity	Nil ☐		Low ■	Moderate ☐	High ☐	V High ☐		
Public Transport Opportunities	Nil ☐		Low ☐	Moderate ■	High ☐	V High ☐		
Occupied Site Area (Ha or m^2)			Nil					
Gross Floor Area (GFA m^2)			Nil					
Employees			Nil					
Other Size (please specify value and units eg seats, rooms, beds, pupils)			28 units					

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)		8 spaces		
Other Parking Spaces Available On-Street Off-site		n/a		
Staff Parking Spaces Provided On-Site		n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site		n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand		1000 - 1015 hrs	5 spaces	
Peak Parking Demand During Survey			0.18 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0730 hrs	0830 hrs		
		IN	0	2 vph (in+out)		
		OUT	2			
	PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs		
		IN	2	2 vph (in+out)		
		OUT	0			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	26 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.07 vph	/unit		
		PM Hr	0.07 vph	/unit		
		DAILY	0.93 vph	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	26	31%
Car Passengers	1	1%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	56	67%
Cyclists	-	-
Bus Passengers	-	-
Total	83	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Saturday**	**12-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A		N/A

A.								
SITE DATA	Activity Name		8-12 Waratah Street, Cronulla					
	Land Use Description		High Density Residential Development					
	Territorial Local Authority		Sutherland Shire Council					
	Street Address & Suburb		8-12 Waratah Street, Cronulla					
	Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐		
	Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐		
			Traffic ADT =	5,941	SH/TLA/Other Rd (State)			
	Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐		
	Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐		
	Occupied Site Area (Ha or m^2)		Nil					
	Gross Floor Area (GFA m^2)		Nil					
	Employees		Nil					
	Other Size (please specify value and units eg seats, rooms, beds, pupils)		28 units					

B.					
PARKING	Parking Spaces Provided On-Site (Inc. Staff)	8 spaces			
	Other Parking Spaces Available On-Street Off-site	n/a			
	Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant	
	Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated	
	Peak Parking Demand	1230 - 1245 hrs	6 spaces		
	Peak Parking Demand During Survey		0.21 spaces / unit		

C.							
TRIP GENERATION	SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
			IN	2	3 vph (in+out)		
			OUT	1			
		PM Peak (veh/hr)	TIME	n/a	n/a		
			IN	0	0 vph (in+out)		
			OUT	0			
		Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
			TOTAL IN+OUT	17			
	Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.11 vph	/unit		
			PM Hr	0 vph	/unit		
			DAILY	0.61 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	17	15%
Car Passengers	9	8%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	90	78%
Cyclists	-	-
Bus Passengers	-	-
Total	116	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Thursday**	**23-Feb-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A.								
SITE DATA	Activity Name		2-8 Ashton Street, Rockdale					
	Land Use Description		High Density Residential Development					
	Territorial Local Authority		Rockdale City Council					
	Street Address & Suburb		2-8 Ashton Street, Rockdale					
	Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐		
	Highest Classification of Frontage Roads		Major Arterial ■	Minor Arterial ☐	Collector ☐	Local ☐		
			Traffic AADT =	858	SH/TLA/Other Rd (State)			
	Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐		
	Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐		
	Occupied Site Area (Ha or m^2)		Nil					
	Gross Floor Area (GFA m^2)		Nil					
	Employees		Nil					
	Other Size (please specify value and units eg seats, rooms, beds, pupils)		234					

B.				
PARKING	Parking Spaces Provided On-Site	260		
	Other Parking Spaces Available On-Street Off-site	n/a		
	Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
	Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
	Peak Parking Demand	0600 - 0615 hrs	195 spaces	
	Peak Parking Demand During Survey		0.83 spaces /dwelling	

C.							
TRIP GENERATION	SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0745 hrs	0845 hrs		
			IN	18	76 (in + out)		
			OUT	58			
		PM Peak (veh/hr)	TIME	1645 hrs	1745 hrs		
			IN	31	49 (in + out)		
			OUT	18			
		Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
			TOTAL IN+OUT	527 vpd			
	Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.32 vph	/dwelling		
			PM Hr	0.21 vph	/dwelling		
			DAILY	2.25 vpd	/dwelling		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	510	41%
Car Passengers	191	15%
Goods Drivers	17	1%
Goods Passengers	2	0%
Pedestrians	535	43%
Cyclists	-	-
Bus Passengers	-	-
Total	1255	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time				
	Saturday	**25-Feb-12**		
N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		2-8 Ashton Street, Rockdale						
Land Use Description		High Density Residential Development						
Territorial Local Authority		Rockdale City Council						
Street Address & Suburb		2-8 Ashton Street, Rockdale						
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐			
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐			
		Traffic AADT =	858	SH/TLA/Other Rd (State)				
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐			
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐			
Occupied Site Area (Ha or m^2)		Nil						
Gross Floor Area (GFA m^2)		Nil						
Employees		Nil						
Other Size (please specify value and units eg seats, rooms, beds, pupils)		234						

B. PARKING

Parking Spaces Provided On-Site	260		
Other Parking Spaces Available On-Street Off-Site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0800 - 0815 hrs	200 spaces	
Peak Parking Demand During Survey		0.85 spaces /dwelling	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
		IN	4	29 vph (in+out)		
		OUT	25			
	PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs		
		IN	32	54 vph (in+out)		
		OUT	22			
	Daily (veh/hr)	TIME	0800	1800		
		TOTAL IN+OUT	394 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.12 vph	/dwelling		
		PM Hr	0.23 vph	/dwelling		
		DAILY	1.68 vpd	/dwelling		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	384	30%
Car Passengers	192	15%
Goods Drivers	10	1%
Goods Passengers	3	0%
Pedestrians	683	54%
Cyclists	-	-
Bus Passengers	-	-
Total	1272	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**3-Apr-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		26-30 Hassal Street, Parramatta						
Land Use Description		High Density Residential Development						
Territorial Local Authority		Parramatta City Council						
Street Address & Suburb		26-30 Hassall Street, Parramatta						
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐			
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐			
		Traffic ADT =	2033	SH/TLA/Other Rd (State)				
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐			
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ☐	High ☐	V High ■			
Occupied Site Area (Ha or m^2)		Nil						
Gross Floor Area (GFA m^2)		Nil						
Employees		Nil						
Other Size (please specify value and units eg seats, rooms, beds, pupils)		83 units						

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	108 spaces			
Other Parking Spaces Available On-Street Off-site	n/a			
Staff Parking Spaces Provided On-Site	n/a	■ Not Relevant		
Staff Parking Spaces On-Street and Off-site	n/a	■ Not Surveyed ☐ Estimated		
Peak Parking Demand	0600 - 0615 hrs	83 spaces		
Peak Parking Demand During Survey		1 space /unit		

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
		IN	6	22 vph (in+out)		
		OUT	16			
	PM Peak (veh/hr)	TIME	1515 hrs	1615 hrs		
		IN	6	11 vph (in+out)		
		OUT	5			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	139 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.27 vehicles	/unit		
		PM Hr	0.13 vehicles	/unit		
		DAILY	1.67 vehicles	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Mode split is derived from interview survey and hence it will not represent the total number of customers/staff at the shopping centre.

Modal Split	Number	%
Car Drivers	131	31%
Car Passengers	38	9%
Goods Drivers	8	2%
Goods Passengers	0	0%
Pedestrians	239	57%
Cyclists	-	-
Bus Passengers	-	-
Total 12 hr Day	416	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time				
	Saturday	**31-Mar-12**		
N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name	26-30 Hassal Street, Parramatta				
Land Use Description	High Density Residential Development				
Territorial Local Authority	Parramatta City Council				
Street Address & Suburb	26-30 Hassall Street, Parramatta				
Survey Site General Location	Rural ☐	Suburb ■	Inner ☐	CBD ☐	
Highest Classification of Frontage Roads	Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐	
	Traffic ADT = 2033		SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ☐	High ☐	V High ■
Occupied Site Area (Ha or m^2)	Nil				
Gross Floor Area (GFA m^2)	Nil				
Employees	Nil				
Other Size (please specify value and units eg seats, rooms, beds, pupils)	83 units				

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	108 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0800 - 0815 hrs	73 spaces	
Peak Parking Demand During Survey		0.88 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW					
AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
	IN	2	14 vph (in+out)		
	OUT	12			
PM Peak (veh/hr)	TIME	1615 hrs	1715 hrs		
	IN	7	11 vph (in+out)		
	OUT	4			
Daily (veh/hr)	TIME	0800	1800		
	TOTAL IN+OUT	115 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)	AM Hr	0.17 vehicles	/unit		
	PM Hr	0.13 vehicles	/unit		
	DAILY	1.39 vehicles	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	113	23%
Car Passengers	64	13%
Goods Drivers	2	0%
Goods Passengers	2	0%
Pedestrians	306	63%
Cyclists	-	-
Bus Passengers	-	-
Total	487	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Thursdsay**	**17-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name			10 Wentworth Drive, Liberty Grove					
Land Use Description			High Density Residential Development					
Territorial Local Authority			City of Canada Bay					
Street Address & Suburb			10 Wentworth Drive, Liberty Grove					
Survey Site General Location			Rural ☐	Suburb ■	Inner ☐	CBD ☐		
Highest Classification of Frontage Roads			Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐		
			Traffic ADT = 2,265		SH/TLA/Other Rd (State)			
Pedestrian Activity	Nil ☐		Low ■	Moderate ☐	High ☐	V High ☐		
Public Transport Opportunities	Nil ☐		Low ☐	Moderate ■	High ☐	V High ☐		
Occupied Site Area (Ha or m^2)			Nil					
Gross Floor Area (GFA m^2)			Nil					
Employees			Nil					
Other Size (please specify value and units eg seats, rooms, beds, pupils)			64 units					

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)		93 spaces		
Other Parking Spaces Available On-Street Off-site		n/a		
Staff Parking Spaces Provided On-Site		n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site		n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand		0600 - 0615 hrs	68 spaces	
Peak Parking Demand During Survey			1.06 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0700 hrs	0800 hrs		
		IN	1	38 vph (in+out)		
		OUT	37			
	PM Peak (veh/hr)	TIME	1630 hrs	1730 hrs		
		IN	11	19 vph (in+out)		
		OUT	8			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	201			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.59 vph	/unit		
		PM Hr	0.3 vph	/unit		
		DAILY	3.14 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	131	31%
Car Passengers	38	9%
Goods Drivers	8	2%
Goods Passengers	0	0%
Pedestrians	247	58%
Cyclists	-	-
Bus Passengers	-	-
Total	424	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time				
	Saturday	**19-May-12**		
N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name	10 Wentworth Drive, Liberty Grove				
Land Use Description	High Density Residential Development				
Territorial Local Authority	City of Canada Bay				
Street Address & Suburb	10 Wentworth Drive, Liberty Grove				
Survey Site General Location	Rural ☐	Suburb ■	Inner ☐	CBD ☐	
Highest Classification of Frontage Roads	Major Arterial ☐	Minor Arterial ☐	Collector ☐	Local ■	
	Traffic ADT = 2,265		SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)	Nil				
Gross Floor Area (GFA m^2)	Nil				
Employees	Nil				
Other Size (please specify value and units eg seats, rooms, beds, pupils)	64 units				

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	93 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0800 - 0815 hrs	64 spaces	
Peak Parking Demand During Survey		1 space /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW					
AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
	IN	1	8 vph (in+out)		
	OUT	7			
PM Peak (veh/hr)	TIME	1600 hrs	1700 hrs		
	IN	31	54 vph (in+out)		
	OUT	23			
Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
	TOTAL IN+OUT	129 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)	AM Hr	0.13 vph	/unit		
	PM Hr	0.84 vph	/unit		
	DAILY	2.02 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	129	30%
Car Passengers	123	29%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	175	41%
Cyclists	-	-
Bus Passengers	-	-
Total	427	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Thursday**	**15-Mar-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		2 Everton Road, Strathfield			
Land Use Description		High Density Residential Development			
Territorial Local Authority		Strathfield Council			
Street Address & Suburb		2 Everton Road, Strathfield			
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ☐	Local ■
		Traffic ADT = 8,747		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ☐	High ■	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		32 units			

B. PARKING

Parking Spaces Provided On-Site	30 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0600 - 0615 hrs	22 spaces	
Peak Parking Demand During Survey		0.69 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0745 hrs	0845 hrs		
		IN	0	3 (in + out)		
		OUT	3			
	PM Peak (veh/hr)	TIME	1630 hrs	1730 hrs		
		IN	2	5 (in + out)		
		OUT	3			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	36			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.09 vph	/unit		
		PM Hr	0.16 vph	/unit		
		DAILY	1.13 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	35	27%
Car Passengers	4	3%
Goods Drivers	1	1%
Goods Passengers	0	0%
Pedestrians	89	69%
Cyclists	-	-
Bus Passengers	-	-
Total	129	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time				
	Saturday	**17-Mar-12**		
N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		2 Everton Road, Strathfield			
Land Use Description		High Density Residential Development			
Territorial Local Authority		Strathfield Council			
Street Address & Suburb		2 Everton Road, Strathfield			
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐
		Traffic ADT = 8,747		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		32 units			

B. PARKING

Parking Spaces Provided On-Site	30 spaces		
Other Parking Spaces Available On-Street Off-Site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0800 - 0815 hrs	19	
Peak Parking Demand During Survey		0.59 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW					
AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
	IN	1	6 vph (in+out)		
	OUT	5			
PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs		
	IN	3	6 vph (in+out)		
	OUT	3			
Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
	TOTAL IN+OUT	51 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)	AM Hr	0.19 vph	/unit		
	PM Hr	0.19 vph	/unit		
	DAILY	1.59 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	51	22%
Car Passengers	24	10%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	158	68%
Cyclists	-	-
Bus Passengers	-	-
Total	233	100%

Survey undertaken by (organisations): Austraffic Surveyor Contacts: Kevin John

Survey undertaken by (surveyor): kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**15-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA						
Activity Name		316 Charlestown Road, Charlestown				
Land Use Description		High Density Residential Development				
Territorial Local Authority		Lake Macquarie City Council				
Street Address & Suburb		316 Charlestown Road, Charlestown				
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐	
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ■	Collector ☐	Local ☐	
		Traffic ADT = 8,581		SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐	
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐	
Occupied Site Area (Ha or m^2)		Nil				
Gross Floor Area (GFA m^2)		Nil				
Employees		Nil				
Other Size (please specify value and units eg seats, rooms, beds, pupils)		108 units				

B. PARKING			
Parking Spaces Provided On-Site (Inc. Staff)	113		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a	■ Not Relevant	
Staff Parking Spaces On-Street and Off-site	n/a	■ Not Surveyed ☐ Estimated	
Peak Parking Demand	0600 - 0615 hrs	88 spaces	
Peak Parking Demand During Survey		0.81 spaces /unit	

C. TRIP GENERATION						
SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0730 hrs	0830 hrs		
		IN	31	59 vph (in+out)		
		OUT	28			
	PM Peak (veh/hr)	TIME	1615 hrs	1715 hrs		
		IN	32	53 vph (in+out)		
		OUT	21			
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs		
		TOTAL IN+OUT	472 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.55 vph	/unit		
		PM Hr	0.49 vph	/unit		
		DAILY	4.37 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	177	27%
Car Passengers	55	8%
Goods Drivers	295	45%
Goods Passengers	0	0%
Pedestrians	124	19%
Cyclists	-	-
Bus Passengers	-	-
Total	651	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**12-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA						
Activity Name		316 Charlestown Road, Charlestown				
Land Use Description		High Density Residential Development				
Territorial Local Authority		Lake Macquarie City Council				
Street Address & Suburb		316 Charlestown Road, Charlestown				
Survey Site General Location		Rural ☐	Suburb ■	Inner ☐	CBD ☐	
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ■	Collector ☐	Local ☐	
		Traffic ADT = 8,581		SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐	
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐	
Occupied Site Area (Ha or m^2)		Nil				
Gross Floor Area (GFA m^2)		Nil				
Employees		Nil				
Other Size (please specify value and units eg seats, rooms, beds, pupils)		108 units				

B. PARKING			
Parking Spaces Provided On-Site (Inc. Staff)	113		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a	■ Not Relevant	
Staff Parking Spaces On-Street and Off-site	n/a	■ Not Surveyed ☐ Estimated	
Peak Parking Demand	0800 - 0815 hrs	73	
Peak Parking Demand During Survey		0.68 spaces /unit	

C. TRIP GENERATION						
SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
		IN	0	10 vph (in+out)		
		OUT	10			
	PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs		
		IN	18	34 vph (in+out)		
		OUT	16			
	Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
		TOTAL IN+OUT	252			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.09 vph	/unit		
		PM Hr	0.31 vph	/unit		
		DAILY	2.3 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	138	27%
Car Passengers	52	10%
Goods Drivers	114	22%
Goods Passengers	0	0%
Pedestrians	205	40%
Cyclists	-	-
Bus Passengers	-	-
Total	509	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**29-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		3-5 Corrimal Street, Wollongong						
Land Use Description		High Density Residential Development						
Territorial Local Authority		Wollongong City Council						
Street Address & Suburb		3-5 Corrimal Street, Wollongong						
Survey Site General Location		Rural ■		Suburb ☐		Inner ☐		CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐		Minor Arterial ☐		Collector ■		Local ☐
		Traffic ADT =	11,144			SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■		Moderate ☐		High ☐		V High ☐
Public Transport Opportunities	Nil ☐	Low ■		Moderate ☐		High ☐		V High ☐
Occupied Site Area (Ha or m^2)		Nil						
Gross Floor Area (GFA m^2)		Nil						
Employees		Nil						
Other Size (please specify value and units eg seats, rooms, beds, pupils)		9 units						

B. PARKING

Parking Spaces Provided On-Site	19 spaces		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0600 - 0615 hrs	14 spaces	
Peak Parking Demand During Survey		1.56 spaces /unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
		IN	1	6 (in + out)		
		OUT	5			
	PM Peak (veh/hr)	TIME	1600 hrs	1700 hrs		
		IN	1	3 (in + out)		
		OUT	2			
	Daily (veh/hr)	TIME	0600	1800 hrs		
		TOTAL IN+OUT	43			
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.67 vph	/unit		
		PM Hr	0.33 vph	/unit		
		DAILY	4.78 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	43	55%
Car Passengers	10	13%
Goods Drivers	0	0%
Goods Passengers	0	0%
Pedestrians	25	32%
Cyclists	-	-
Bus Passengers	-	-
Total	78	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Saturday**	**26-May-12**		
	N/A	Extended Data Collection (Several Days)	N/A		N/A

A.								
SITE DATA	Activity Name		3-5 Corrimal Street, Wollongong					
	Land Use Description		High Density Residential Development					
	Territorial Local Authority		Wollongong City Council					
	Street Address & Suburb		3-5 Corrimal Street, Wollongong					
	Survey Site General Location		Rural ■	Suburb ☐	Inner ☐	CBD ☐		
	Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐		
			Traffic ADT = 11,144		SH/TLA/Other Rd (State)			
	Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐		
	Public Transport Opportunities	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐		
	Occupied Site Area (Ha or m^2)		Nil					
	Gross Floor Area (GFA m^2)		Nil					
	Employees		Nil					
	Other Size (please specify value and units eg seats, rooms, beds, pupils)		9 units					

B.					
PARKING	Parking Spaces Provided On-Site	19 spaces			
	Other Parking Spaces Available On-Street Off-site	n/a			
	Staff Parking Spaces Provided On-Site	n/a			■ Not Relevant
	Staff Parking Spaces On-Street and Off-site	n/a			■ Not Surveyed ☐ Estimated
	Peak Parking Demand	0800 - 0815 hrs	15 spaces		
	Peak Parking Demand During Survey		1.67 spaces /unit		

C.						
TRIP GENERATION	SITE SURVEYED ARRIVAL/DEPARTURE FLOW	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs	
			IN	0	1 (in + out)	
			OUT	1		
		PM Peak (veh/hr)	TIME	1700 hrs	1800 hrs	
			IN	2	6 (in + out)	
			OUT	4		
		Daily (veh/hr)	TIME	0800 hrs	1800 hrs	
			TOTAL IN+OUT	33 vpd		
	Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.1 vph /unit		
			PM Hr	0.67 vph /unit		
			DAILY	3.67 vpd /unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	33	35%
Car Passengers	19	20%
Goods Drivers	0	0%
Goods Passengers	3	3%
Pedestrians	40	42%
Cyclists	-	-
Bus Passengers	-	-
Total	95	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time				
	Saturday	**23-Jun-12**		
N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name	209 Harris Street Pyrmont				
Land Use Description	High Density Residential Development				
Territorial Local Authority	City of Sydney Council				
Street Address & Suburb	209 Harris Street Pyrmont				
Survey Site General Location	Rural ☐	Suburb ☐	Inner ■	CBD ☐	
Highest Classification of Frontage Roads	Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐	
	Traffic ADT = 10,215		SH/TLA/Other Rd (State)		
Pedestrian Activity	Nil ☐	Low ■	Moderate ☐	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ☐	High ☐	V High ■
Occupied Site Area (Ha or m^2)	Nil				
Gross Floor Area (GFA m^2)	Nil				
Employees	Nil				
Other Size (please specify value and units eg seats, rooms, beds, pupils)	131				

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	199		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0900 - 0915 hrs	88 spaces	
Peak Parking Demand During Survey		0.67 spaces / unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW					
AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs		
	IN	6	11 vph (in+out)		
	OUT	5			
PM Peak (veh/hr)	TIME	1645 hrs	1745 hrs		
	IN	7	11 vph (in+out)		
	OUT	4			
Daily (veh/hr)	TIME	0800 hrs	1800 hrs		
	TOTAL IN+OUT	145 vpd			
Peak Trip Rate per $100m^2$ or other unit (state)	AM Hr	0.08 vph	/unit		
	PM Hr	0.08 vph	/unit		
	DAILY	1.1 vpd	/unit		

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	137	22%
Car Passengers	68	11%
Goods Drivers	8	1%
Goods Passengers	4	1%
Pedestrians	420	66%
Cyclists	-	-
Bus Passengers	-	-
Total	637	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

SITE SURVEY SUMMARY SHEET

Survey for (name of client/council):	**High Density Residential Trip Generation Surveys**	Office Ref Only

Survey Period Date & Time		**Tuesday**	**26-Jun-12**		
	N/A	Extended Data Collection (Several Days)	N/A	N/A	

A. SITE DATA

Activity Name		209 Harris Street Pyrmont			
Land Use Description		High Density Residential Development			
Territorial Local Authority		City of Sydney Council			
Street Address & Suburb		209 Harris Street Pyrmont			
Survey Site General Location		Rural ☐	Suburb ☐	Inner ■	CBD ☐
Highest Classification of Frontage Roads		Major Arterial ☐	Minor Arterial ☐	Collector ■	Local ☐
		Traffic ADT = 10,215		SH/TLA/Other Rd (State)	
Pedestrian Activity	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Public Transport Opportunities	Nil ☐	Low ☐	Moderate ■	High ☐	V High ☐
Occupied Site Area (Ha or m^2)		Nil			
Gross Floor Area (GFA m^2)		Nil			
Employees		Nil			
Other Size (please specify value and units eg seats, rooms, beds, pupils)		131			

B. PARKING

Parking Spaces Provided On-Site (Inc. Staff)	199		
Other Parking Spaces Available On-Street Off-site	n/a		
Staff Parking Spaces Provided On-Site	n/a		■ Not Relevant
Staff Parking Spaces On-Street and Off-site	n/a		■ Not Surveyed ☐ Estimated
Peak Parking Demand	0600 - 0615 hrs	99 spaces	
Peak Parking Demand During Survey		0.76 spaces / unit	

C. TRIP GENERATION

SITE SURVEYED ARRIVAL/DEPARTURE FLOW					
	AM Peak (veh/hr)	TIME	0800 hrs	0900 hrs	
		IN	10	23 vph (in+out)	
		OUT	13		
	PM Peak (veh/hr)	TIME	1645 hrs	1745 hrs	
		IN	10	18 vph (in+out)	
		OUT	8		
	Daily (veh/hr)	TIME	0600 hrs	1900 hrs	
		TOTAL IN+OUT	135 vpd		
Peak Trip Rate per $100m^2$ or other unit (state)		AM Hr	0.18 vph	/unit	
		PM Hr	0.14 vph	/unit	
		DAILY	1.03 vpd	/unit	

GENERAL COMMENTS AND NOTES

e.g. Site location characteristics, parking durations, and other special aspects (school holidays, public holidays)

Modal Split	Number	%
Car Drivers	118	30%
Car Passengers	22	6%
Goods Drivers	17	4%
Goods Passengers	3	1%
Pedestrians	240	60%
Cyclists	-	-
Bus Passengers	-	-
Total	400	100%

Survey undertaken by (organisations):	Austraffic	Surveyor Contacts:	Kevin John
Survey undertaken by (surveyor):			kevin.john@austraffic.com.au

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Document Status

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