

QUEANBEYAN TRANSPORT PLAN

2011 Model Building Report



Prepared by



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Queanbeyan Transport Plan

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Queanbeyan Transport Plan

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1. EXECUTIVE SUMMARY

In 2012 Queanbeyan Council commissioned Gabites Porter to update their 2006 three-step transportation model of the Queanbeyan LGA based on the 2011 Census Land Use and traffic flows. This report details the creation and validation of that model.

The land use and traffic modelling used for this study comprises of four sequential stages. That is, trip generation, trip distribution, trip assignment and evaluation. It models a typical 2011 weekday morning peak and evening peak period.

The 2011 land use model area covers the region contained within the Queanbeyan and Canberra LGAs. Canberra was included in the model to help reproduce the cross border interaction that occurs between Queanbeyan and ACT. The study area however is bordered on the east and south sides by the ACT-NSW border, just below the Monaro Hwy and Old Cooma Rd junction in the south, and in the east as far as the Wanna Wanna Nature Reserve.

The road network used in the study was obtained from QCC and ACT GIS systems and includes all roads within the Queanbeyan study area and all roads of Collector or higher status in the ACT.

The full model zone system covers the entire ACT and Queanbeyan model area. The zone system used within the ACT portion of the model is identical to that used in the existing ACT EMME/2 Model except for the Queanbeyan portion which is detailed in more detail.

The ACT zone system comprises of 744 zones, including 8 externals. Of the 766 internal zones, 681 are designated to zones with established land use with the remaining 85 internal zones distributed in clusters surrounding Canberra as 'spares' to provide for future developments.

The Queanbeyan study area part of the model itself was also divided into sub areas to form a zone system. The study area part of the model consists of a further 270 zones, including 5 externals. Of the 265 internal zones, 215 are designated to zones with established land use with the remaining 50 internal zones distributed in clusters surrounding Queanbeyan as 'spares' to provide for future developments. An additional 201 spare zones were added to the model to provide for even more expansion should it be needed. In total there are 1200 zones represented in the model.

For household data the procedure followed was to extract the data at SA1 level from the Census Community Profile, and then allocate each SA1 to either a single model zone or multiple zones based on SA1 size. The following is a summary of the total land use used in the model.

Land use Variable	Model Area Total
Households	143,487
Employees	215,861
Employees per HH	1.504
Vehicles	243,647
Vehicles per HH	1.698
Primary School Roll	36,108

Land use Variable	Model Area Total
Secondary School Roll	32,864
Tertiary Roll	31,432
Retail Jobs	16,403
Finance Jobs	3,866
Community Jobs	22,726
Manufacturing Jobs	6,579
Other Jobs	157,117
Total Jobs	206,744
HQJOC	780

The model operated through the standard trip generation, trip distribution and trip assignment stages until convergence in the operation of the model was achieved. Convergence occurs then the assignment and distribution steps are run iteratively until the totals of both the time and distance matrices between successive runs remain close to each other and relatively constant. Convergence occurred when both models achieved differences between runs of less than 0.05%.

Validation of the model requires that the output traffic volumes from the model approximate what occurs in reality. This was done through checking model flows against actual count flows along a number of screenlines are drawn across the study area to capture the major traffic patterns that are occurring. This validation included seven screenlines and a number of additional miscellaneous count locations.

Required screenline validation criteria were met in most instances for both model periods with some minor exceptions. In the morning peak period the screenline south of Canberra Ave had an overall GEH of 4.3 (requirement of <4.0 in most instances) and in both periods for screenline 8, containing the miscellaneous sites, had an RMS of just over 30% (requirement of <30% in most instances).

An additional means of validation used in the model was travel time validation. Travel time validation determines the appropriate link types, or link speed in the modelled network. Link types along all surveyed routes are iteratively selected to consistently produce modelled travel times within the acceptable margin of error as defined by the survey variation.

The majority of travel time routes were within the variation bounds of the surveyed data even though the survey data was from 2006 due to no recent data being available. On three instances the modelled journey time were outside the surveyed results but is expected when comparing to 2006 survey times. For the two routes that were high, ie travelling longer, this could be expected due to the 2011 network being busier. The route that is low, ie running faster, is on Lanyon Drive which has been four-laned since the 2006 survey.

This model has been created to, as closely as possible, replicate the traffic movements within the Queanbeyan LGA during a typical weekday in 2011 based on available traffic data.

Gabites Porter believes that the model building aspect of this project has been done in full accordance with the project brief and satisfies standard model validation criteria.

2. INTRODUCTION

2.1 Study Approach

In 2012 Queanbeyan Council commissioned Gabites Porter to update their 2006 three-step transportation model of the Queanbeyan LGA. This model utilised 2011 Census land use data and a 2011 road network.

The transportation model developed for this study followed a three-step process of trip generation, distribution and assignment. The generation step used a household category model and regression equations for trip productions, with regression derived equations for attractions. The distribution step used a standard doubly constrained gravity model to distribute trips, with the distribution functions based on time. The assignment step used a capacity restraint technique, with trip paths based on behavioural costs, and delays calculated on links and at intersections.

A fourth step in the process is to use the transportation model to assess and evaluate network and land use options.

A transportation model for a given time period comprises a group of linked mathematical formulae that approximate the traffic network and the general behaviour of drivers using it. It is accepted that the analysis may not take into account extremes of human behaviour, nor will it reflect all the subtle complexities of the transport system. Nevertheless the model that has been developed is capable of identifying the more significant factors and is adequate to test adjustments to the road network and land use system, which are likely to show the greatest benefit in relation to their costs.

The following period models were developed, with the following applications in mind.

Transportation Model	Modelling	Application
<i>Morning Peak</i>	One peak hour Between (0700 – 0900 hrs)	<ul style="list-style-type: none"> ▪ Peak inbound traffic flows ▪ Central area access routes ▪ Intersection performance ▪ Design issues ▪ Site specific issues
<i>Evening Peak</i>	One peak hour Between (1600 – 1800 hrs)	<ul style="list-style-type: none"> ▪ Peak outbound traffic flows ▪ Central area egress routes ▪ Intersection performance ▪ Design issues ▪ Site specific issues

Note; an inter-peak period (0900 – 1600) has been run but not validated and may be useful for some analyses.

Modelling necessitates a series of compromises because of the constraints of current techniques, or because data is not available by which to utilise the techniques, or because resources are not available at the time.

Nevertheless, a model is a `living' tool, which can and should be improved incrementally over the years as needs dictate and resources permit.

2.2 Report Content

This report, as its title suggests is designed as a technical document. It is designed as a reference volume of how the transportation model was built and, we believe, contains all the information necessary to completely build the analytical system. It highlights the assumptions made, the techniques adopted, and the relationships used. It also demonstrates the extent to which the model used was validated in terms of how well it replicates actual traffic flows.

3. MODEL DATA

The following sections will detail the data used in the creation of the model. This comprises the land use, which is fundamental to the trip making process of the model, trip generation and attraction components, trip distribution coefficients, assignment parameters and finally the validation flows and speeds.

The majority of this data was taken from standard coefficients and parameters used in all validated TRACKS models based in New South Wales and accepted by the RTA as being suitable for typical model building process. A 1997 ACT Household Interview travel Survey provided valuable data on trip length frequencies within ACT and Queanbeyan for the calibration of the model trip distribution coefficients.

Traffic flow data was provided by QCC staff. This enabled all screenlines used in the previous 2006 model to be updated to 2011 and was used for the model validation.

4. MODEL OVERVIEW

4.1 Hardware Requirements

The transportation model was developed within the transportation planning package TRACKS, and run on stand-alone PC systems using Windows 98 or greater.

4.2 Model Form

Planning of a land use transport system requires that the system can be adequately modelled and the effects of any change can be reliably forecast.

A useful method is to build mathematical models that simulate travel behaviour. The land use and traffic modelling used for this study comprises of four sequential stages. That is, trip generation, trip distribution, trip assignment and evaluation.

Trip End Generation

The generation of trip ends for each sub area (zone) within the study area. The trip ends were generated according to the pattern of households, schools and employment activity, and then allocated accordingly.

The model was based on vehicle trips rather than person trips. Subsequently the modal split phase was inherent in the trip end generation rather than following the distribution stage.

Trip Distribution

The conversion of trip ends to trips distributed within the study area according to a function of activity and travel cost.

Trip Assignment

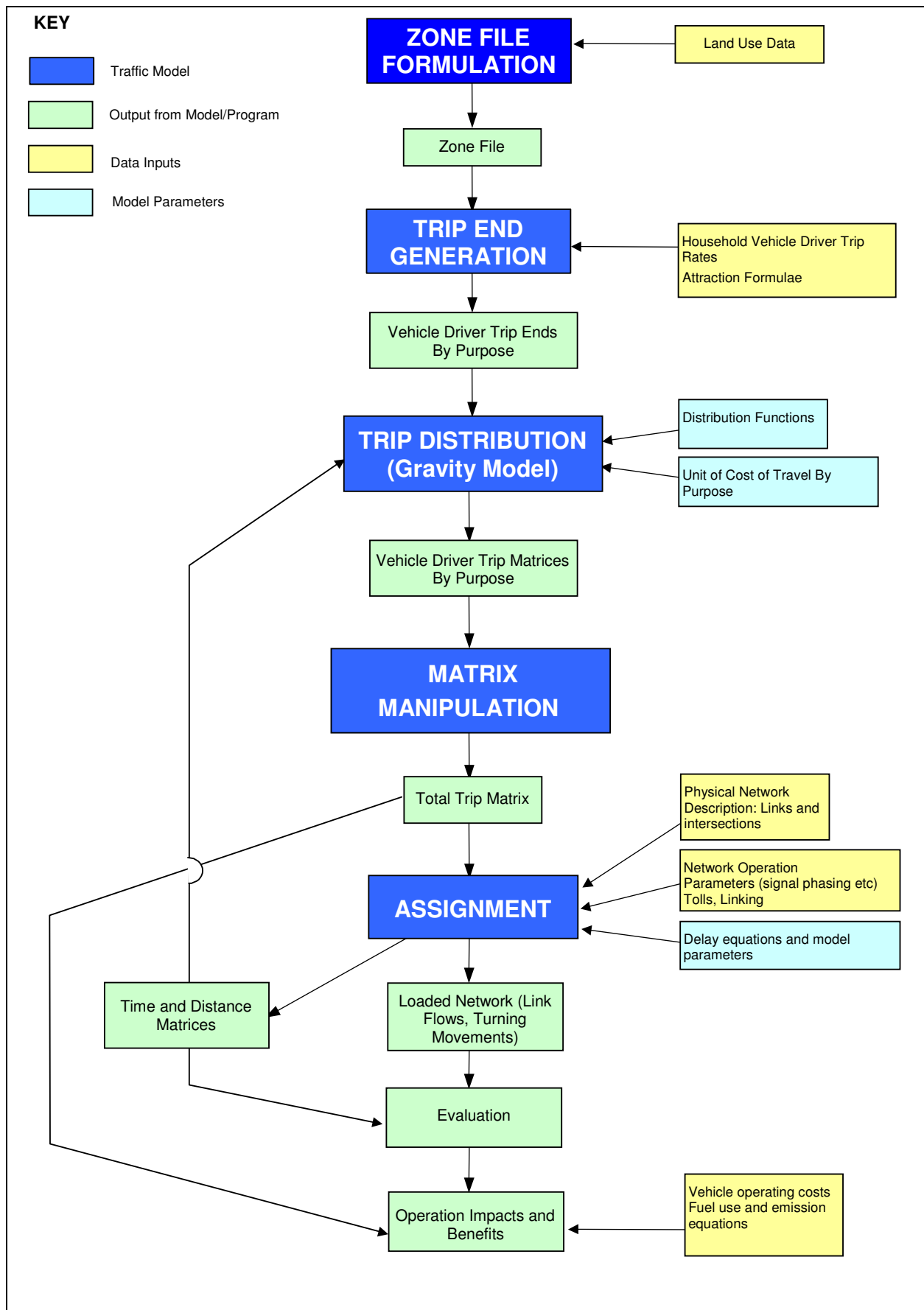
The loading of trips onto the road network as traffic flows between zones.

Evaluation

The final stage of the process where operational impacts are assessed.

The relationship between the different components are summarised schematically in **Figure 1**.

There is an iteration process where the interzonal times and distances which result from the assignment phase feed back into the trip distribution phase. The process can be started by assuming times and distances as initial impacts to distribution, or by assuming initial trips as the input to the assignment. In any event, the assignment/distribution loop is repeated until there is little or no change in the vehicle hours and vehicle kilometres of travel between iterations. This process is known as 'converging' the network.



Queanbeyan Transport Plan	Vehicle Driver Model Components	Figure 1
Gabites Porter		

4.3 The Model Area

The 2011 land use model area covers the region contained within the Queanbeyan and Canberra LGAs. Canberra was included in the model to help reproduce the cross border interaction that occurs between Queanbeyan and ACT.

The study area however is bordered on the east and south sides by the ACT-NSW border, just below the Monaro Hwy and Old Cooma Rd junction in the south, and in the east as far as the Wanna Wanna Nature Reserve. Development in Queanbeyan occurs mainly in the Northwestern area, as evident by the higher population and road density in the town proper.

4.4 The Road Network

The road network used in the study was obtained from QCC and ACT GIS systems and includes all roads within the Queanbeyan study area and all roads of Collector or higher status in the ACT. The road network for the entire model area is shown in **Figure 2** and within the Queanbeyan Study area in **Figure 3**.

Each link in the network was allocated a specific volume delay curve to reflect the nature of the link and the way in which traffic behaves as flows increase. A more detailed discussion of the use of these is in **Section 6** of this report.

4.5 The Zone System

The full model zone system covers the entire ACT and Queanbeyan model area. The zone system used within the ACT portion of the model is identical to that used in the existing ACT EMME Model except for the Queanbeyan portion which is detailed below in more detail.

The ACT zone system comprises of 744 zones, including 8 externals. Of the 736 internal zones, 681 are designated to zones with established land use with the remaining 85 internal zones distributed in clusters surrounding Canberra as 'spares' to provide for future developments. This model area zone system is shown in **Figure 4**.

The Queanbeyan study area part of the model itself was also divided into sub areas to form a zone system. The study area part of the model consists of a further 270 zones, including 5 externals. Of the 265 internal zones, 215 are designated to zones with established land use with the remaining 50 internal zones distributed in clusters surrounding Queanbeyan as 'spares' to provide for future developments. This study area zone system is shown in **Figure 5** and **Figure 6**.

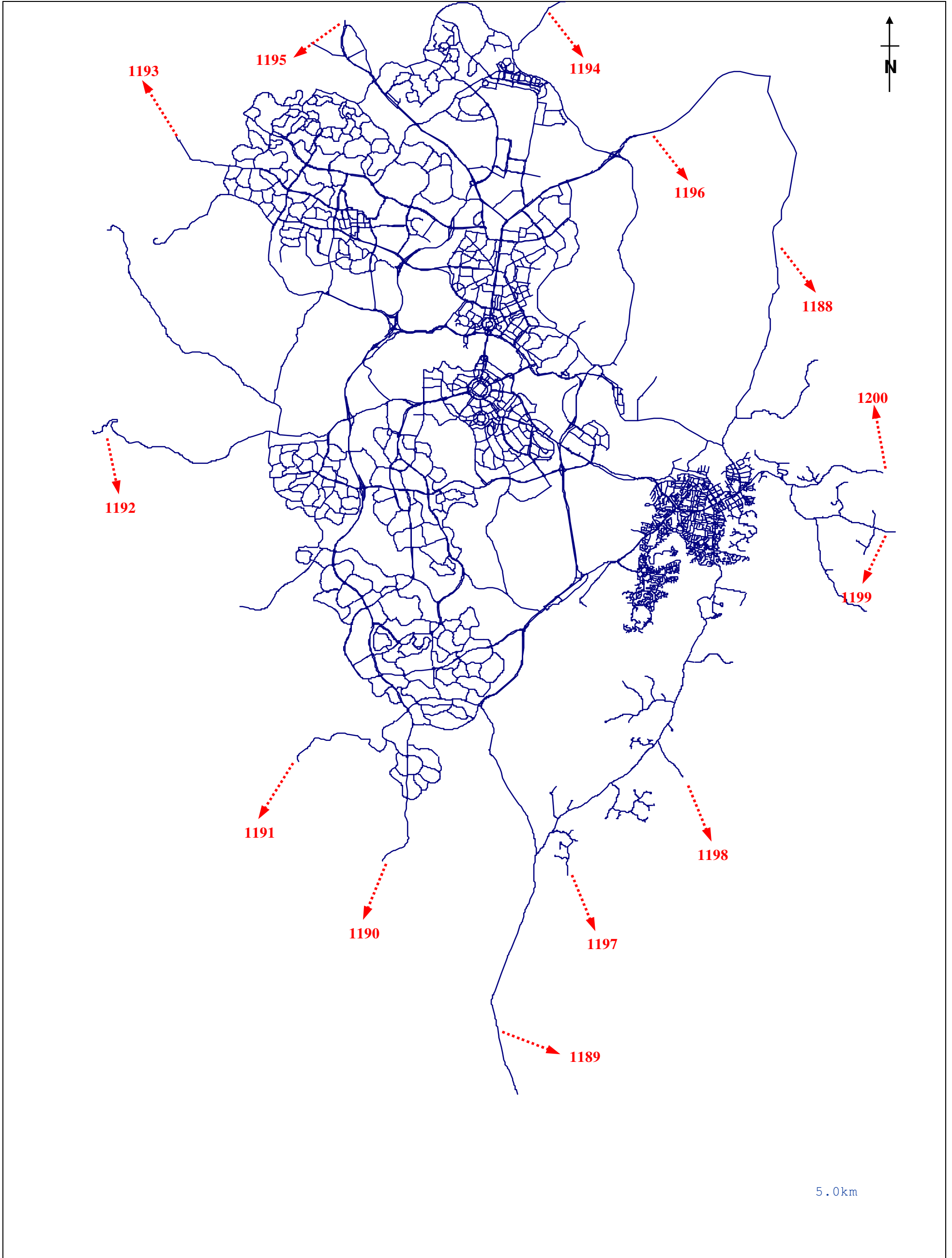
An additional 201 spare zones were added to the model to provide for even more expansion should it be needed. In total there are 1200 zones represented in the model.

The model zone system adopted was based upon other systems for which land use data was available. The main source of land use data was the 2011 Census carried out by the Australian Bureau of Statistics (ABS).

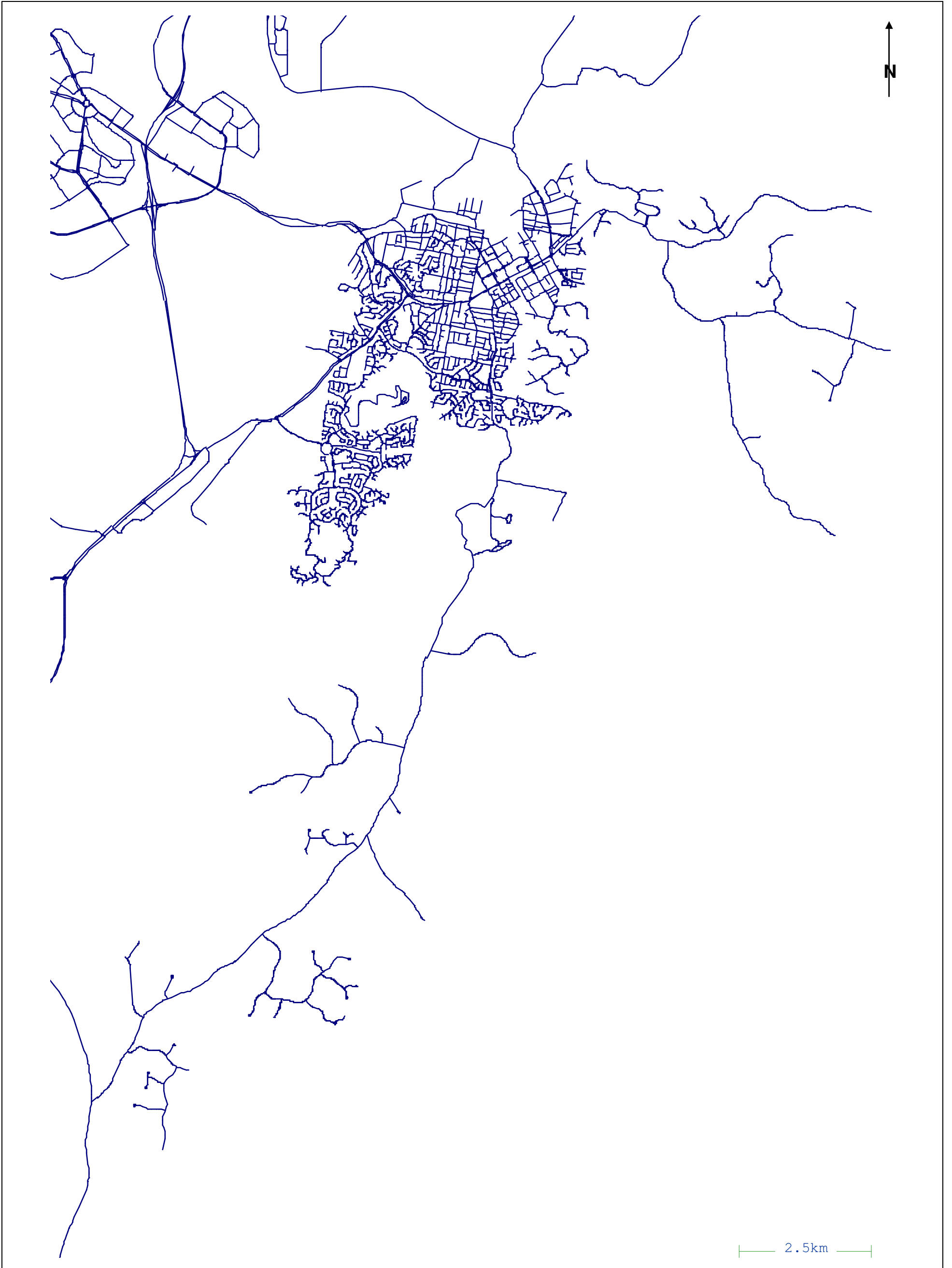
Amalgamation of the Census data was based upon one of the following (from broadest to finest): -

Census Zone Systems		Table 1
SLA (Statistical Local Area)	Journey to Work destination zone	
TDC (Transport Data Centre Zone)	Journey to Work origin/destination and industrial standard job data	
ABS Origin Zone (similar to TSZ, some numbers different)	Journey to Work origin zone	
SA1 (Statistical Area 1)	Community Profile Household Data (number of employees, vehicles, persons)	
SA2 (Statistical Area 2)	Working Population Profile Data (employment by type)	

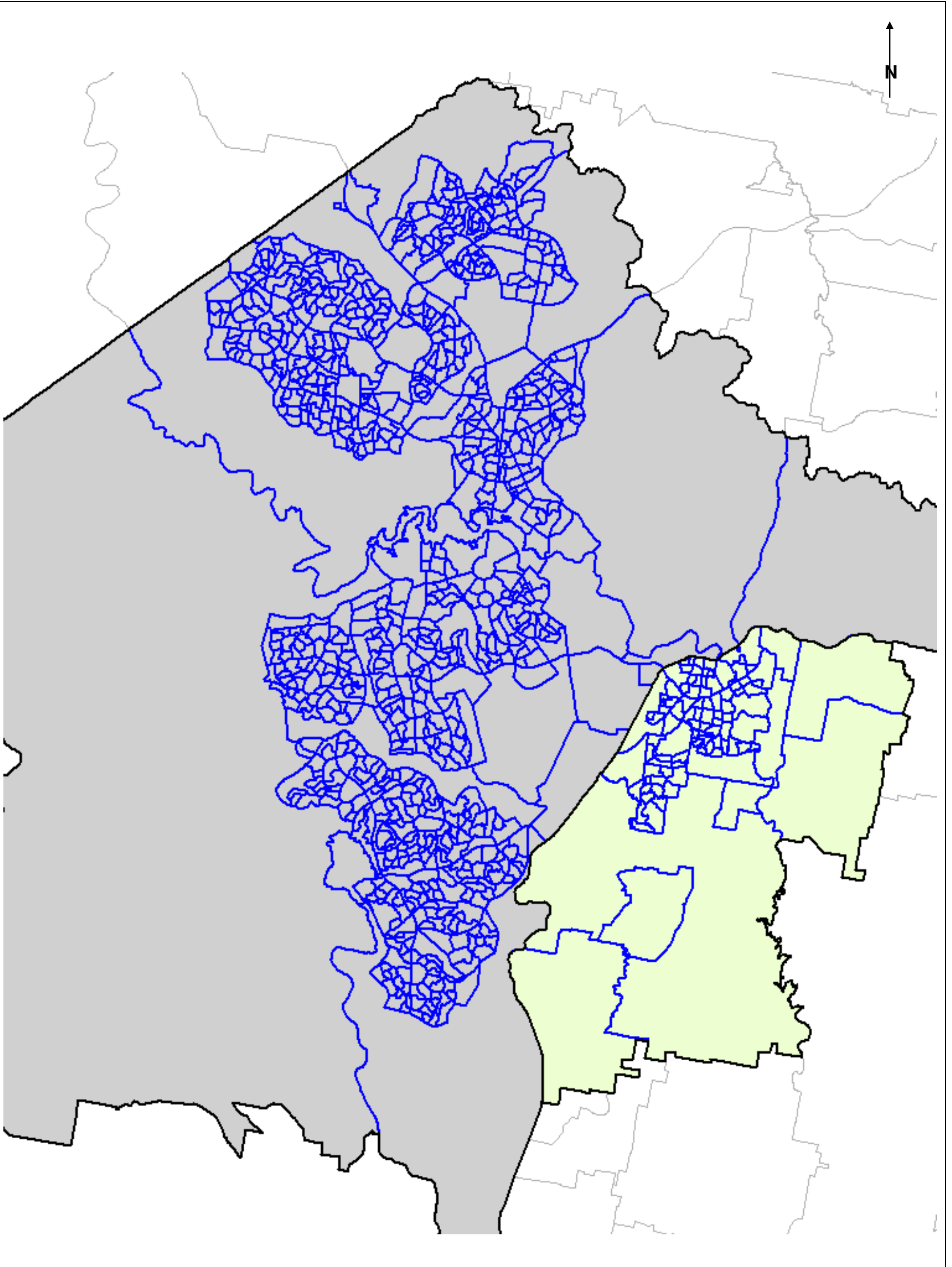
On average each SA1 area was represented by one model traffic zone. SA2 totals were split over the model zones in their respective area as per the distribution used in the previous 2006 model.



Queanbeyan Transport Plan	Model Road Network	Figure 2
Gabites Porter		



Queanbeyan Transport Plan	Queanbeyan Study Area Road Network	Figure 3
Gabites Porter		

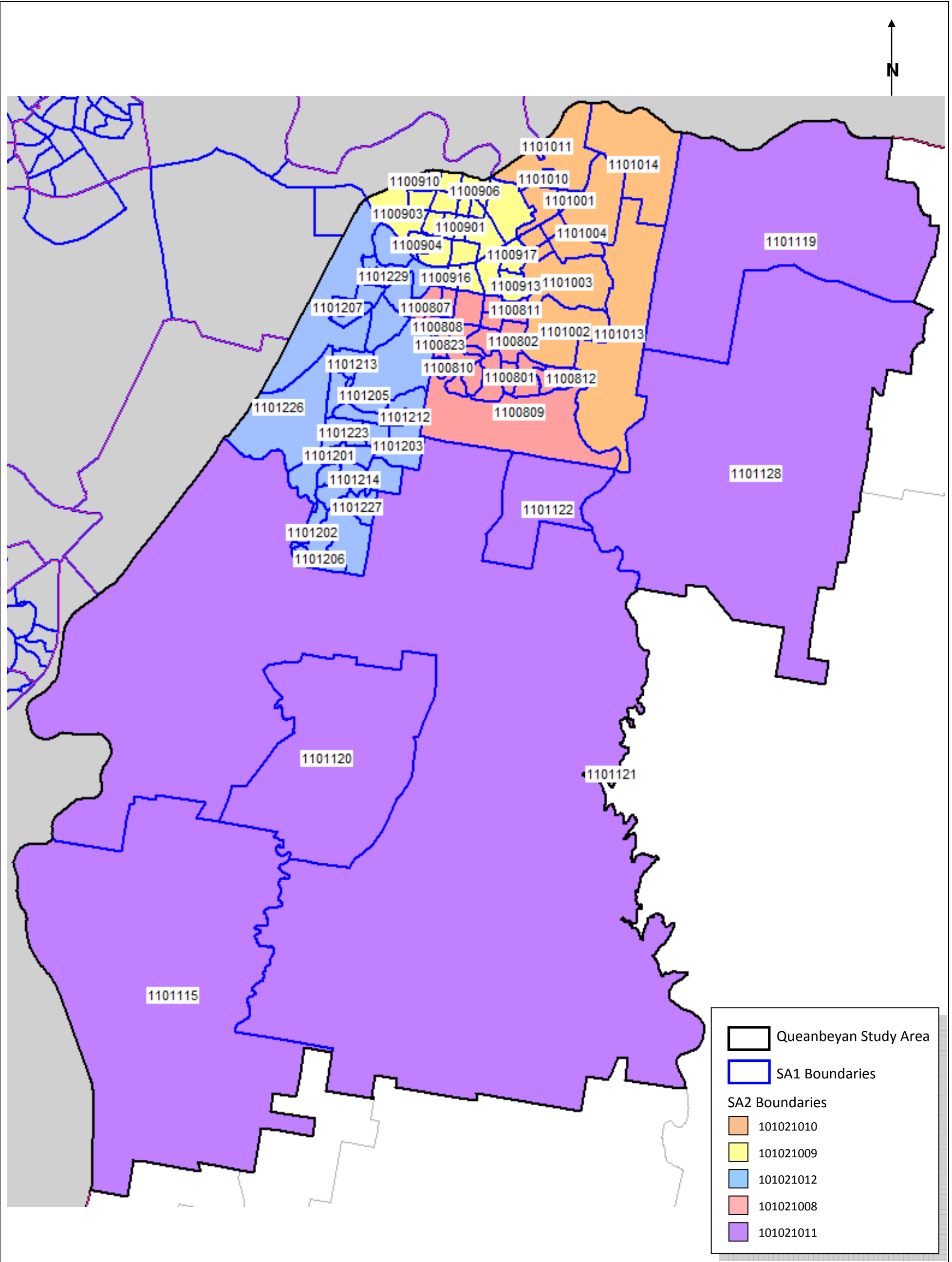


Queanbeyan Transport Plan

Model Area Zone System - Northern

Figure 4

Gabites Porter



5. LAND USE DATA

5.1 Existing (2011) Land Use

The 2011 land use information was used for the creation of the base network.

Queanbeyan household data was based on SA1 ex 2011 ABS census data:

- Households (number occupied on census night)
- Average vehicles available/household
- Average number of employees/household

ACT household data was taken from the Census SA2 household totals and distributed as per the previous (2006) model. This distribution of household data was used as input into the ACT EMME/2 model of Canberra and contained land use details for all Canberra zones.

At the workplace location jobs have been identified and located using SA2 areas from the 2011 ABS census data placed according to the distribution of the previous (2006) model and using the Australian New Zealand Standard Industry Classifications (ANZSIC) Major Divisions for all full time + part time jobs (i.e. number of people employed):

- Division C - Manufacturing
- Division F – Wholesale Trade
- Division G - Retail Trade
- Division K – Finance and Insurance
- Division O – (Health and) Community Services
- Total Jobs

Education school roll data was obtained from the rolls of private and public schools for Queanbeyan from the NSW Department of Education. In ACT the distribution of schools was taken from the previous (2006) model but adjusted according to overall growth as taken from Census school roll totals.

5.2 Household Data

For household data the procedure followed was to extract the data at SA1 level from the Census Community Profile, and then allocate each SA1 to either a single model zone or multiple zones based on SA1 size.

The correlation of TRACKS zone to SA1 zone is listed in **Appendix 1**. This appendix also contains the correlation between TRACKS zone and ACT EMME/2 model zone.

5.3 Land use Summary

Table 2 and **Table 3** summarises the 2011 land use totals that apply to the model and study areas.

2011 Entire Model Land use Data		Table 2
Land use Variable	Model Area Total	
Households	143,487	
Employees	215,861	
Employees per HH	1.504	
Vehicles	243,647	
Vehicles per HH	1.698	
Primary School Roll	36,108	
Secondary School Roll	32,864	
Tertiary Roll	31,432	
Retail Jobs	16,403	
Finance Jobs	3,866	
Community Jobs	22,726	
Manufacturing Jobs	6,579	
Other Jobs	157,117	
Total Jobs	206,744	
HQJOC	780	

2011 Queanbeyan Study Area Land use Data		Table 3
Land use Variable	Study Area Total	
Households	14,086	
Employees	21,095	
Employees per HH	1.498	
Vehicles	25,180	
Vehicles per HH	1.788	
Primary School Roll	3,204	
Secondary School Roll	1,532	
Tertiary Roll	331	
Retail Jobs	1,200	
Finance Jobs	128	
Community Jobs	1,154	
Manufacturing Jobs	1,430	
Other Jobs	5,635	
Total Jobs	9,546	
HQJOC	780	

Land use by zone is included in **Appendix 2**.

6. TRIP END GENERATION

6.1 General

When producing a traffic model, one is concerned specifically with vehicle driver trips. These trips can be broken down into a number of purposes depending upon what activity or type of land use was involved at the origin and destination. Such activities may be:

- Own Home
- Own Workplace
- Education
- Shopping
- Employer's Business
- Personal Business
- Changing Travel Mode
- Social/recreation etc.
- Collect/Deliver Passenger (Serve Passenger)

Private trips can then be defined as one of five trip purposes described below depending on the land use and activity at the trip ends.

Home Based Work	(HBW)	All trips with one end at home and the other at own work place.
Home Based Business	(HBB)	All trips with one end at home and the other an activity of Shopping or Personal or Employer's Business.
Home Based Education	(HBE)	All trips with one end at home and the other at a school or other centre for education.
Home Based Other	(HBO)	All trips with one end at home and the other an activity of Social/Recreation or any other purpose.
Non Home Based	(NHB)	All trips with neither end at home.

Private trip data is derived from Sydney Household Interview Surveys (HIS). This determines the proportion of trips in each purpose and the time period in which each trip was made. Checks against available ACT HIS results were made to ensure that generation rates were compatible.

The other trip purposes used for the study were:

Light Goods Vehicles	(LGV)	
Heavy Goods Vehicles	(HGV)	
External Traffic	(EXT)	Through traffic (external to external); Internally generated private trips (internal to external); Other internally generated trips and externally generated (external to internal) trips.

6.2 Household Interview Survey

Background

The Queanbeyan Transport Plan Model uses the results derived from the Sydney HIS survey carried out in 1991/92 by the Transport Study Group (TSG). The HIS consisted of a household personal interview survey in Sydney of which the Illawarra household data was used by Gabites Porter to develop the Illawarra transport model. It sought to capture information on all travel undertaken for a nominated 24-hour period by all members of each selected household.

A comparison of the Sydney HIS 24hr trip generation rates with the 1997 ACT HIS reported 24hr generation rates indicate close compatibility. The ACT HIS reported a 24hr vehicle trip generation rate of 8.2 road vehicle trips per day per household. This is very close agreement with the Sydney HIS rate of 8.16 road vehicle trips per day per household.

Vehicle Driver Trip rates

Data from the HIS was used to generate vehicle driver trips made within the Illawarra study area. The data is therefore the most applicable to the local environs of Illawarra however the data is likely to closely model driver trip rates and behaviour in the Queanbeyan LGA. The Traffic Data Centre were asked to provide vehicle driver trip rates by household categories of the following trip purposes:

Home to Work	Work to Home
Home to Education	Education to Home
Home to Shopping	Shopping to Home
Home to Employer Business	Employer Business to Home
Home to Personal Business	Personal Business to Home
Home to Recreation	Recreation to Home
Home to Other	Other to Home
Non Home Based	

The household categories were:

Vehicles per Household	Employees per Household
0	0
1	1
2+	2+

For modelling, the trip purposes were combined to match those used for other studies. The adopted trip purposes and their constituents are as follows:

Model Trip Purpose	HIS Purposes
Home Based Work	Work
Home Based Business	Shopping, Employers Business, Personal Business
Home Based Education	Education
Home Based Other	Social, Recreation, Other
Non Home Based	Non Home Based

Trip End Generation

Based upon sound transportation planning techniques and models, a category model approach to trip end generation was adopted. For the category model the two variables of employees per household and vehicle availability per household were used to determine the total number of vehicle trips made within the study area on an average weekday. Nine categories were used - three employee categories by three vehicle availability categories. The curves describing the percentage of households within each category for a specific household composition are shown in **Figure 7**.

The AM (7-9AM) and PM (4-6pm) Peak trip rates (i.e. number of vehicle trips per household within these time periods) are displayed in the following sections for the private purposes shown below where trip generation was based on the category model.

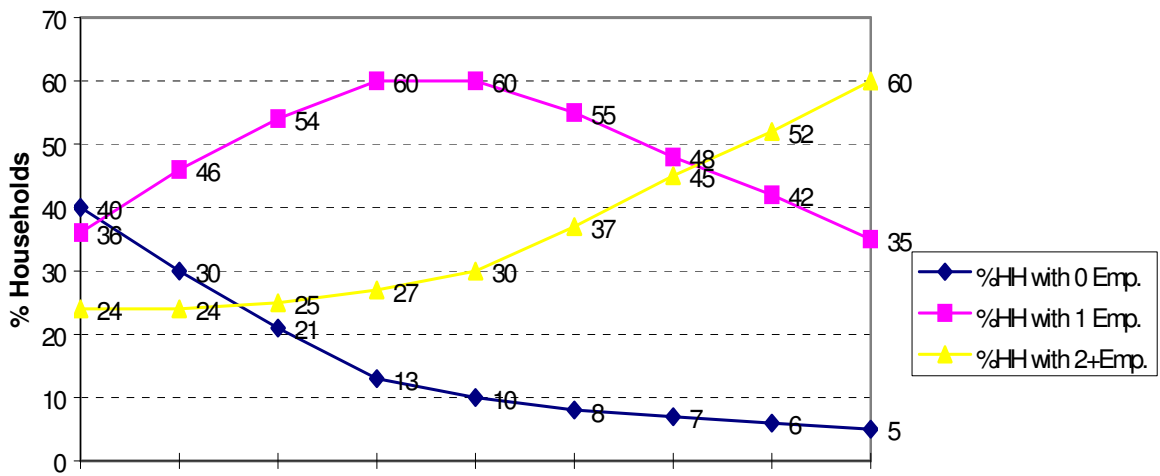
Note that the NHB trips have been separated into two purposes such that half of the trips are short NHB and the other half are long NHB trips. This has been done to more closely model traffic behaviour in the study area by allowing two different attraction equations and generalised cost coefficients for the NHB private trip purposes as detailed in the following sections of this report.

Home Based Education trips are not isolated in either the Evening Peak period as there are very few generated in the periods modelled. Instead these few trips are incorporated into the Home Based Other trip purpose for these periods.

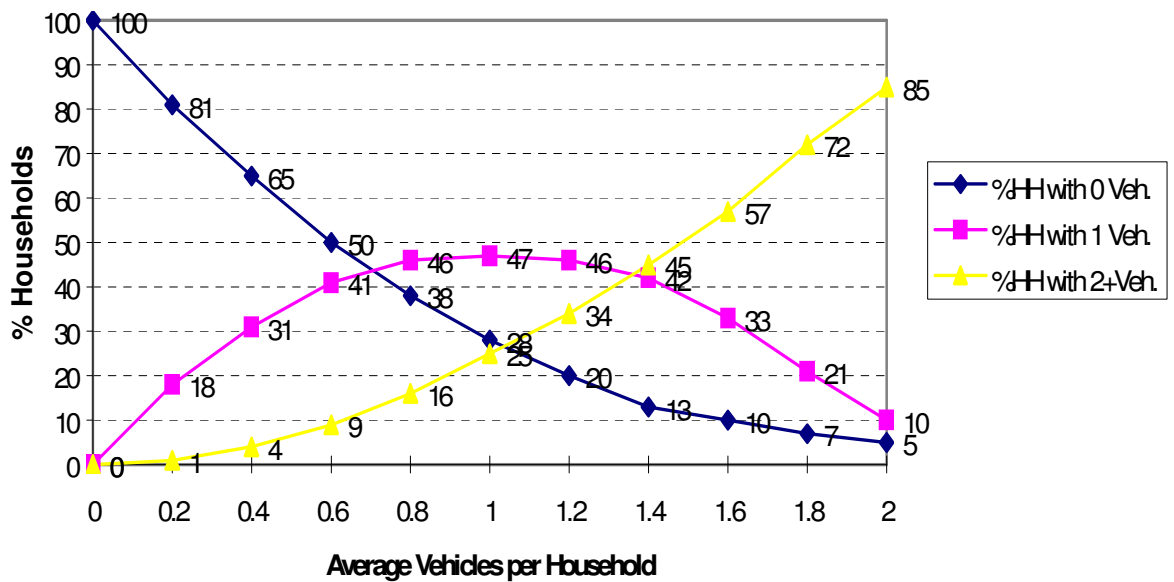
Experience has shown that where possible 'from home' and 'to home' trips should be modelled separately in order to preserve the directionality of the trips. This is particularly important in the evening peak, which is more diverse than the morning peak. The private trips were consequently divided into the following separate purposes:

HTW	=	Home to Work
WTH	=	Work to Home
HTB	=	Home to Business
BTH	=	Business to Home
HTE	=	Home to Education
HTO	=	Home to Other
OTH	=	Other to Home
NHB-S	=	Non Home Based (Short Trips)
NHB-L	=	Non Home Based (Long Trips)

EMPLOYEE CATEGORY CURVES



VEHICLE OWNERSHIP CATEGORY CURVES



Queanbeyan Transport Plan

Gabites Porter

Household Category Curves

Figure 7

6.2.1 Morning Peak Private Trip End Productions

Private car driver trip ends were produced by using the 'category model' derived from the TSG Home Interview Survey (HIS) data. The morning peak period generation is for the two hours for trips beginning between 7am and 9am. Generation was carried out as 'Home to' and 'to Home' purposes to reflect the tidal movement of trips.

Note that the resulting two-hour trip matrix is later converted to a one-hour matrix when the total trip matrix is formed for assignment to the modelled road network using a factor derived from representative vehicles counts in the study area. For the morning peak hour this factor was 0.600. This factor represents an average over the whole study area and therefore will not equate exactly with all parts of the network because traffic origins at different times depending on location.

The trip rates used are shown in **Table 4** and **Table 5** below.

Morning Peak Period 'Home To' Trip End Production Rates by Purpose and Category									Table 4
Category	Employee/ HH	Car/ HH	Trip Purpose						
			HTW	HTB	HTS	HTO	NHB-S	NHB-L	
1	0	0	0	0	0	0	0	0	
2	0	1	0.010	0.070	0.010	0.010	0.003	0.003	
3	0	2+	0.048	0.123	0.046	0.046	0.027	0.027	
4	1	0	0.000	0.000	0.000	0.000	0.070	0.070	
5	1	1	0.335	0.056	0.072	0.072	0.102	0.102	
6	1	2+	0.429	0.190	0.145	0.145	0.172	0.172	
7	2+	0	0.000	0.000	0.000	0.000	0.075	0.075	
8	2+	1	0.424	0.080	0.140	0.140	0.176	0.176	
9	2+	2+	0.493	0.310	0.130	0.130	0.207	0.207	

Morning Peak Period 'To Home' Trip End Production Rates by Purpose and Category						Table 5
Category	Employees /HH	Cars/ HH	Trip Purpose			
			WTH	BTH	OTH	
1	0	0	0	0	0	
2	0	1	0.000	0.054	0.024	
3	0	2+	0.000	0.056	0.033	
4	1	0	0.000	0.000	0.000	
5	1	1	0.032	0.018	0.007	
6	1	2+	0.038	0.038	0.085	
7	2+	0	0.000	0.000	0.000	
8	2+	1	0.078	0.110	0.000	
9	2+	2+	0.024	0.100	0.055	

6.2.2 Evening Peak Private Trip End Productions

Private car driver trip ends were similarly produced for the evening peak. The evening peak period generation is for trips which began between the two hours from 4pm to 6pm. Generation was carried out as 'Home to' and 'to Home' purposes to reflect the tidal movement of trips.

Note that the resulting two-hour trip matrix is later converted to a one-hour matrix when the total trip matrix is formed for assignment to the modelled road network using a factor derived from representative vehicles counts in the study area. For the morning peak hour this factor was 0.601. This factor represents an average over the whole study area and therefore will not equate exactly with all parts of the network because traffic origins at different times depending on location.

The trip rates used are shown in **Table 6** and **Table 7** below.

Evening Peak Period 'Home To' Trip End Production Rates by Purpose and Category							Table 6
Category	Employees /HH	Cars/ HH	Trip Purpose				
			HTW	HTB	HTO	NHB-S	NHB-L
1	0	0	0	0	0	0	0
2	0	1	0	0.041	0.078	0.065	0.065
3	0	2+	0	0.077	0.1	0	0
4	1	0	0	0	0	0	0
5	1	1	0.043	0.066	0.094	0.123	0.123
6	1	2+	0.034	0.137	0.106	0.242	0.242
7	2+	0	0	0	0	0	0
8	2+	1	0	0.049	0.149	0.251	0.251
9	2+	2+	0	0.167	0.246	0.356	0.356

Evening Peak Period 'To Home' Trip End Production Rates by Purpose and Category						Table 7
Category	Employees /HH	Cars/ HH	Trip Purpose			
			WTH	BTH	OTH	
1	0	0	0	0	0	
2	0	1	0.012	0.066	0.143	
3	0	2+	0.046	0.13	0.222	
4	1	0	0	0	0	
5	1	1	0.128	0.206	0.16	
6	1	2+	0.233	0.293	0.328	
7	2+	0	0	0	0	
8	2+	1	0.355	0.127	0.374	
9	2+	2+	0.265	0.403	0.408	

For any particular zone the average number of vehicles per household and number of employees per household were provided in the land use zone files. The proportion of

households in each category was established from the combined probability curves shown in **Figure 7**.

When the above generation rates are applied to the full Model area a total of **171342** private trips in the AM Peak period and **209784** private trips in the PM Peak period are generated. These are summarised by purpose in **Table 8**.

Model Area Private Vehicle Trip Productions				Table 8
	AM (0700-0900) Trips	% of AM Private Trips	PM (1600-1800) Trips	% of PM Private Trips
HTW	52526	31.0%	2280	1.1%
WTH	4442	2.6%	29414	14.0%
HTB	24650	14.4%	15621	7.4%
BTH	8453	4.9%	36646	17.5%
HTO	15568	9.1%	20005	9.5%
HTS	15568	9.1%	-	-
OTH	6399	3.7%	42086	20.0%
NHB-S	21868	12.8%	31866	15.2%
NHB-L	21868	12.8%	31866	15.2%
Total Private Trips	171342	100.0%	209784	100.0%

When the above generation rates are applied to the Queanbeyan LGA Study Area household land use data a total of **16763** private trips in the AM Peak period and **21618** private trips in the PM Peak period are generated. These are summarised by purpose in **Table 8**.

Queanbeyan Study Area Private Vehicle Trip Productions				Table 9
	AM (0700-0900) Trips	% of AM Private Trips	PM (1600-1800) Trips	% of PM Private Trips
HTW	5750	34.3%	244	1.1%
WTH	482	2.9%	3219	14.9%
HTB	2678	16.0%	1640	7.6%
BTH	928	5.5%	3885	18.0%
HTO	1710	10.2%	2131	9.9%
HTS	1486	8.9%	-	-
OTH	695	4.1%	4508	20.9%
NHB-S	1422	8.5%	2844	13.2%
NHB-L	1612	9.6%	3147	14.6%
Total Private Trips	16763	100.0%	21618	100.0%

6.2.3 Private Trip End Attractions

Home Based Trips

The preceding section determined the number of trips being produced by each household. Those trip ends generated then need to be allocated to destinations. To do this, regression equations were used based upon the land uses available. Without survey data to derive regression equations specific to the Queanbeyan LGA, attractions equations have been imported from other studies. These equations have come from the validated Wollondilly Transportation Model (2004), Wingecarribee Transportation Model (2007) and West Dapto Traffic Model (2008). These attraction equations have been tuned in the validation process to assist in modelling travel behaviour specific to the Queanbeyan Study Area.

The attraction equations used in the AM peak model are as follows:

$$\begin{aligned} \text{HTW} &= 0.251\text{RET} + 0.251\text{FIN} + 0.170\text{TOT} \\ \text{WTH} &= 0.251\text{RET} + 0.251\text{FIN} + 0.170\text{TOT} \\ \text{HTB} &= 0.184\text{RET} + 0.184\text{FIN} + 0.032\text{TOT} \\ \text{BTH} &= 0.184\text{RET} + 0.184\text{FIN} + 0.032\text{TOT} \\ \text{HTO} &= 0.043\text{COM} + 0.043\text{MAN} + 0.005\text{OTH} \\ \text{OTH} &= 0.025\text{PRI} + 0.025\text{SEC} + 0.043\text{COM} + 0.043\text{MAN} + 0.005\text{OTH} \\ \text{HTS} &= 0.025\text{PRI} + 0.025\text{SEC} + 0.025\text{TER} + 0.043\text{COM} \end{aligned}$$

The PM peak attraction equations are as follows:

$$\begin{aligned} \text{HTW} &= 0.251\text{RET} + 0.251\text{FIN} + 0.170\text{TOT} \\ \text{WTH} &= 0.251\text{RET} + 0.251\text{FIN} + 0.170\text{TOT} \\ \text{HTB} &= 0.184\text{RET} + 0.184\text{FIN} + 0.092\text{MAN} + 0.184\text{OTH} + 0.032\text{TOT} \\ \text{BTH} &= 0.184\text{RET} + 0.184\text{FIN} + 0.092\text{MAN} + 0.184\text{OTH} + 0.032\text{TOT} \\ \text{HTO} &= 1.52\text{HH} + 0.680\text{RET} + 1.920\text{COM} + 1.920\text{MAN} + 2.920\text{OTH} + 0.51\text{TOT} \\ \text{OTH} &= 1.52\text{HH} + 0.680\text{RET} + 1.920\text{COM} + 1.920\text{MAN} + 2.920\text{OTH} + 0.51\text{TOT} \end{aligned}$$

where:

HH	=	Households
PRI	=	Primary School Roll
SEC	=	Secondary School Roll
TER	=	Tertiary Roll
RET	=	Retail Employment
FIN	=	Finance Employment
COM	=	Community Employment
MAN	=	Manufacturing Employment
OTH	=	Other Employment
TOT	=	Total Employment

Non-Home Based

Non-home based trips from the category model have been evenly separated into either long trips (NHB-L) or short trips (NHB-S) with the following attraction equations:

AM Peak

$$\text{NHB-L} = 0.018\text{HH} + 0.184\text{SEC} + 0.184\text{RET} + 0.032\text{TOT}$$

$$\text{NHB-S} = 0.018\text{HH} + 0.184\text{SEC} + 0.184\text{RET} + 0.032\text{TOT}$$

PM Peak

$$\text{NHB-L} = 0.740\text{HH} + 4.668\text{RET} + 1.310\text{COM}$$

$$\text{NHB-S} = 0.740\text{HH} + 4.668\text{RET} + 1.310\text{COM}$$

Note that for home based trips, (HBW, HBB, HBO, HBE) attractions were scaled to equal productions, with the trip end distribution staying the same as that generated at each zone by the category model. NHB-L and NHB-S attractions were also scaled to equal total productions, however as is typical with NHB trip making, the scaled attraction distribution was accepted for both ends of the trip.

6.2.4 Goods Vehicle Trips

Light and Heavy Goods Vehicle movements are important components of transport models. This study has incorporated a general background level of goods vehicle activity by modelling these trips as two separate purposes.

Regression equations were used to provide both productions and attractions for goods vehicles. For internal to internal trips it is difficult to determine whether the origin or destination generates the demand for the trip. Hence the same equation is used to generate both the productions and attractions.

The LGV and HGV equations are the same as those used in the Illawarra models and originate from the Christchurch Commercial Vehicle Survey (1993). The equations used were:

AM Peak

$$\text{LGV} = 0.011\text{HH} + 0.521\text{MAN} + 0.171\text{TOT}$$

$$\text{HGV} = 0.012\text{HH} + 0.063\text{RET} + 0.016\text{COM} + 0.071\text{MAN}$$

PM Peak

$$\text{LGV} = 0.070\text{HH} + 0.528\text{FIN}$$

$$\text{HGV} = 0.015\text{HH} + 0.078\text{RET} + 0.019\text{COM} + 0.088\text{MAN}$$

6.2.5 External Trips

For vehicle trips entering or leaving the study area there are 13 external cordon stations (see **Figure 2** to **Figure 3**). The Airport has been considered as an external for the purposes of replicating passenger movement.

Traffic entering the study area via roads crossing the study area boundary is called external traffic. External traffic consists of trips travelling through the study area and trips

with an origin or destination within the model area. All external trips have been generated as only the peak one hour traffic as opposed to the internal trips which have been generated for two hours so as to replicate more correctly movements during the peak hour.

Through Trips

Through trips are those travelling through the model area without stopping. All external trips have been assumed to have a stop somewhere inside the model area and therefore there are no through trips.

However, there are trips that could be considered through trips within the Queanbeyan Study area. The Queanbeyan area was ringed by a cordon that recorded the origin and destination of trips crossing the cordon. The results of the modelling of these “through” trips showed that in the AM Peak hour 1123 vehicles travelled through Queanbeyan out of a total of 15186 vehicles (7.4%). In the PM Peak hour 1121 vehicles out of a total of 17577 vehicles passed through Queanbeyan (6.4%).

Other External Trips

The remaining external traffic where generated by using available traffic count data at each model external location. Those locations are shown in **Figure 2** to **Figure 3**.

The attraction equations were specific for each modelled period and were as follows:

$$\begin{aligned} \text{Inbound AM Peak Attractions} &= 0.070\text{SEC} + 0.251\text{RET} + 0.170\text{TOT} \\ \text{Outbound AM Peak Attractions} &= 0.036\text{HH} + 0.184\text{RET} + 0.032\text{TOT} \\ \\ \text{Inbound PM Peak Attractions} &= 0.036\text{HH} + 0.184\text{RET} + 0.032\text{TOT} \\ \text{Outbound PM Peak Attractions} &= 0.251\text{RET} + 0.170\text{TOT} \end{aligned}$$

where:

- HH = Households
- PRI = Primary School Roll
- SEC = Secondary School Roll
- TER = Tertiary Roll
- RET = Retail Employment
- FIN = Finance Employment
- COM = Community Employment
- MAN = Manufacturing Employment
- OTH = Other Employment
- TOT = Total Employment

The traffic flows used are shown in **Table 10** and **Table 11**.

AM Peak External Traffic Flows – 1 Hour

Table 10

Zone	Description	Inbound 1hr Flow	Outbound 1hr Flow
1188	Airport	575	575
1189	Monaro Hwy	32	126
1190	Tharwa Rd	0	0
1191	Point Hut Rd	0	0
1192	Cotter Rd	0	0
1193	Parkwood Rd	0	0
1194	Gundaroo Rd	0	0
1195	Barton Hwy	483	23
1196	Federal Hwy	978	460
1197	Thoroughbred Dr	42	4
1198	Burra Rd	197	18
1199	Captains Flat Rd	239	42
1200	Kings Hwy	300	150
ALL EXTERNAL STATIONS		2846	1398

PM Peak External Traffic Flows – 1 Hour

Table 11

Zone	Description	Inbound 1hr Flow	Outbound 1hr Flow
987	Airport	575	575
988	Monaro Hwy	95	49
989	Tharwa Rd	0	0
990	Point Hut Rd	0	0
991	Cotter Rd	0	0
992	Parkwood Rd	0	0
993	Gundaroo Rd	0	0
994	Barton Hwy	23	483
995	Federal Hwy	460	978
996	Thoroughbred Dr	22	2
997	Burra Rd	33	282
998	Captains Flat Rd	47	231
999	Kings Hwy	150	350
ALL EXTERNAL STATIONS		1405	2950

6.3 Total Model Area Trip End Generation

Total trip productions are summarised in **Table 12** and **Table 13**. These are based on the relationships given in the preceding sections.

Model Area Total AM Peak (7-9am) Trip Matrix		Table 12
Private		171342
LGV		40359
HGV		3586
External		4244
TOTAL TRIPS		219531

Model Area Total PM Peak (4-6PM) Trip Matrix		Table 13
Private		209784
LGV		12085
HGV		4442
External		4355
TOTAL TRIPS		230666

7. TRIP DISTRIBUTION AND THE COSTS OF TRAVEL

7.1 The Gravity Distribution Model

The gravity model form chosen for this work was

$$T_{ij} = P_i \cdot K_i \cdot A_j \cdot L_j \cdot f(c_{ij})$$

subject to the double constraints of

$$K_i = \frac{P_i}{\sum_j T_{ij}}$$

$$L_j = \frac{A_j}{\sum_i T_{ij}}$$

Where:

T_{ij} = Trips between zones i and j

P_i = Productions at zone i

A_j = Attractions at zone j

$f(c_{ij})$ = Function of the travel cost between zones i and j

$K_i L_j$ = Balancing factors

The balancing factors are successively applied until there is convergence. Some 30 iterations were used, and all purposes converged so that there was no difference between iterations to five decimal places.

The derivation of P_i and A_j has been discussed earlier. This section will deal with the distribution function $f(c_{ij})$ and the costs of travel.

7.2 The Distribution Function

Trip distribution is time only based. A time-based distribution was found to give a better fit than using a generalised cost derived from both time and distance costs.

The time only distribution function can be approximated to an exponential line of the form:

$$f(c_{ij}) = e^{-\alpha t_{ij}}$$

Where:

$f(c_{ij})$ = function of time only cost of travel between zone i and zone j

t_{ij} = time between zone i and zone j

α = exponent

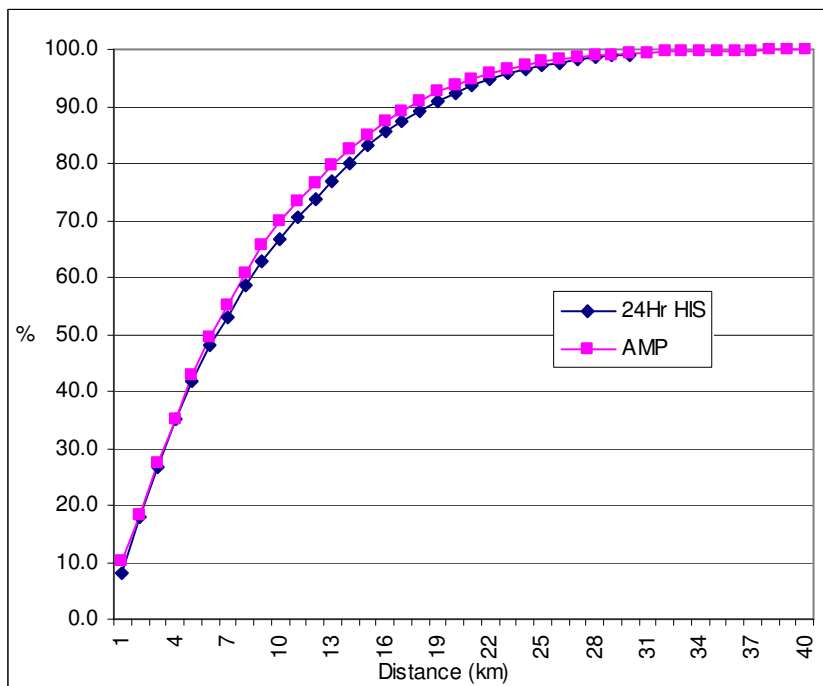
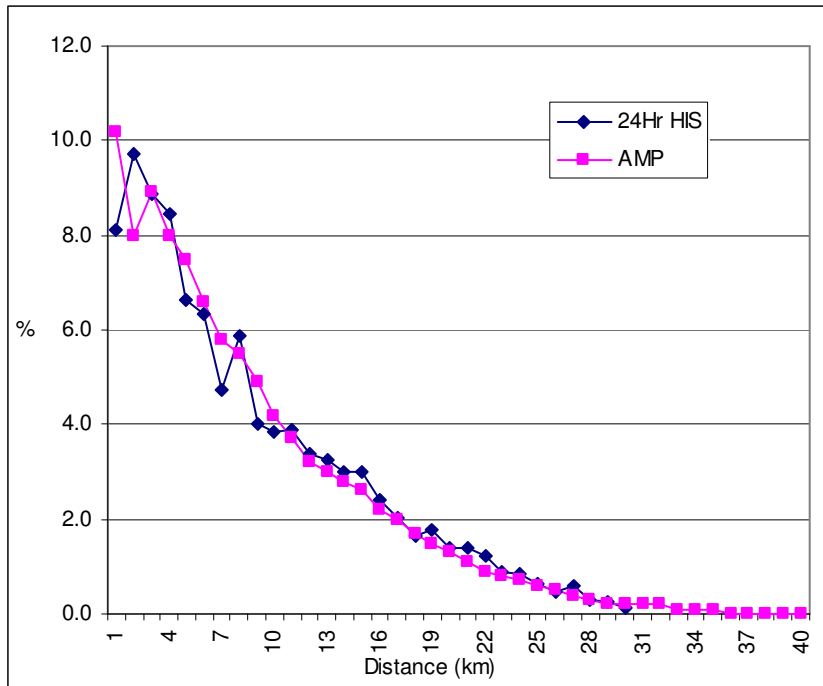
The distribution function values used (α) are shown in **Table 14**. It should be noted that the alpha values are the same for 'from home' and 'to home' purposes.

Time Based Distribution Function Exponents		Table 14	
Trip Purpose	Morning Peak	Evening Peak	
Home Based Work	0.20	0.20	
Home Based School	0.64	-	
Home Based Business	0.26	0.26	
Home Based Other	0.26	0.26	
Non Home Based -Long	0.26	0.26	
Non Home Based - Short	0.38	0.38	
Light Goods Vehicles	0.26	0.26	
Heavy Goods Vehicles	0.11	0.11	
Externals Inbound	0.12	0.13	
Externals Outbound	0.12	0.13	

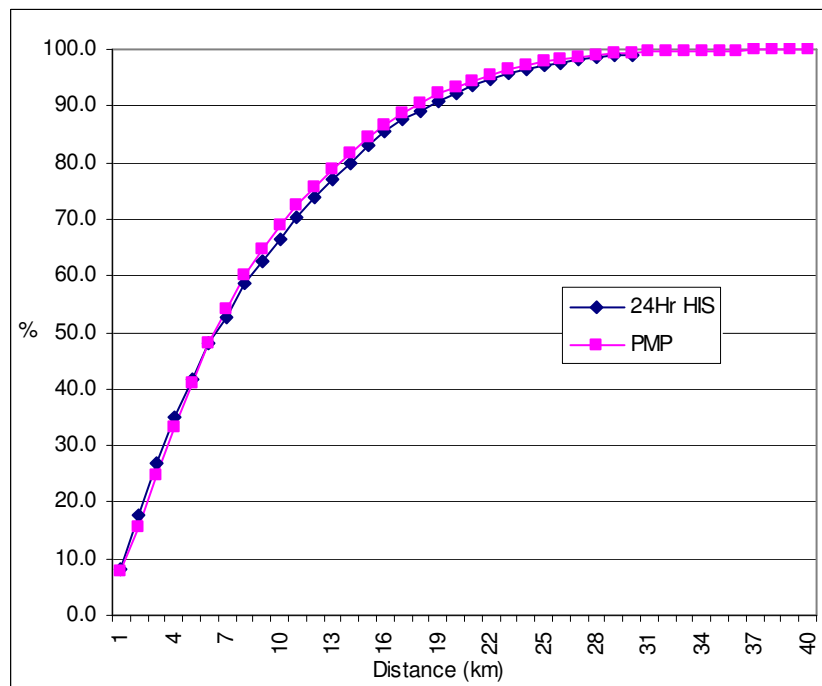
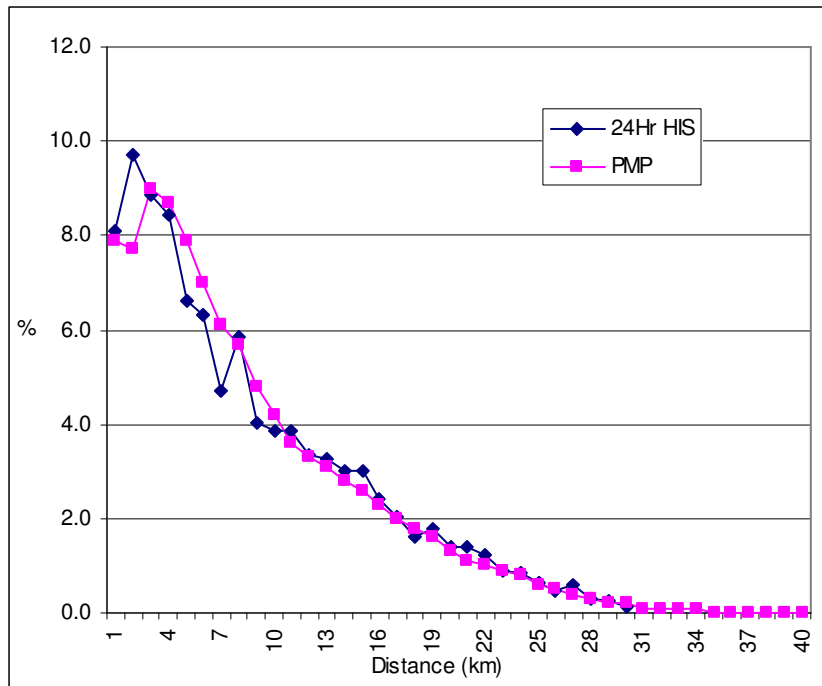
As mentioned in the Trip Generation section of this report, the Non Home Based trips have been split such that 50% are “short” trips and 50% are “long” trips. By applying a larger exponent to the Non Home Based Short trip purpose the trip lengths are shortened.

A trip length frequencies analysis for the total number of trips has been undertaken, for which results are shown in the following **Figure 8** to **Figure 9**.

The model AMP and PMP Distance Trip Length Frequencies have been compared to the ACT HIS All Day Distance Frequencies to ensure that the model's response is consistent with the HIS results. Model results cannot reflect surveyed results exactly as they are peak hour distributions and therefore not exactly equivalent to the HIS all day distributions.



Queanbeyan Transport Plan	AM Peak Trip Length Frequencies	Figure 8
Gabites Porter		



Queanbeyan Transport Plan	PM Peak Trip Length Frequencies	Figure 9
Gabites Porter		

8. TRIP ASSIGNMENT

8.1 General

An incremental assignment procedure was followed using multiple iterations and a loading profile for the AM and PM Peak periods are shown in **Table 15** and **Table 16** respectively.

Interzonal time and distance matrices were extracted during the assignment process and are a weighted sum corresponding to the points on the loading profile.

AM Peak Assignment Parameters				Table 15
Assignment Increment	% Trip Matrix Loaded	Load Profiles % of Hourly Flow Rate	Steady State Time Period (Minutes)	Perceived Assignment Costs
1	15			23.44 20.51 c/min c/km
2	15			
3	15			
4	15			
5	15			
6	5.6	80.6	15	
7	4.2			
8	4.3	89.1	15	
9	2.7			
10	2.7			
11	2.7	97.2	15	
12	1.4			
13	1.4	100.0	15	

PM Peak Assignment Parameters				Table 16
Assignment Increment	% Trip Matrix Loaded	Load Profiles % of Hourly Flow Rate	Steady State Time Period (Minutes)	Perceived Assignment Costs
1	12			23.44 20.51 c/min c/km
2	12			
3	12			
4	12			
5	12			
6	12			
7	12			
8	4.2	88.2	15	
9	3.9			
10	3.9	96	15	
11	2.5	98.5	15	
12	1.5	100	15	

8.2 Network Links

Journey times were established by a combination of link times and delays at intersections. The simplest form of calculating journey times used in New Zealand in the 1960's and 1970's attributes all delay (link and intersection) to links in the road network. Speed/flow, or volume/delay relationships were derived for various types of road. Selection of the appropriate curve was made on the basis of a number of variables, which physically described the road.

Results from surveys in the 1988 Wellington GATS Study first allowed link only delays to be empirically separated. The volume delay relationships used in this study were for delays on links only and were based on those analytically derived by Akcelik: 1 using a time dependent Davidson model.

Each link in the network is given a volume delay curve depending of the speed limit, function and characteristic of the road the link represents. A steady state period of one hour was used.

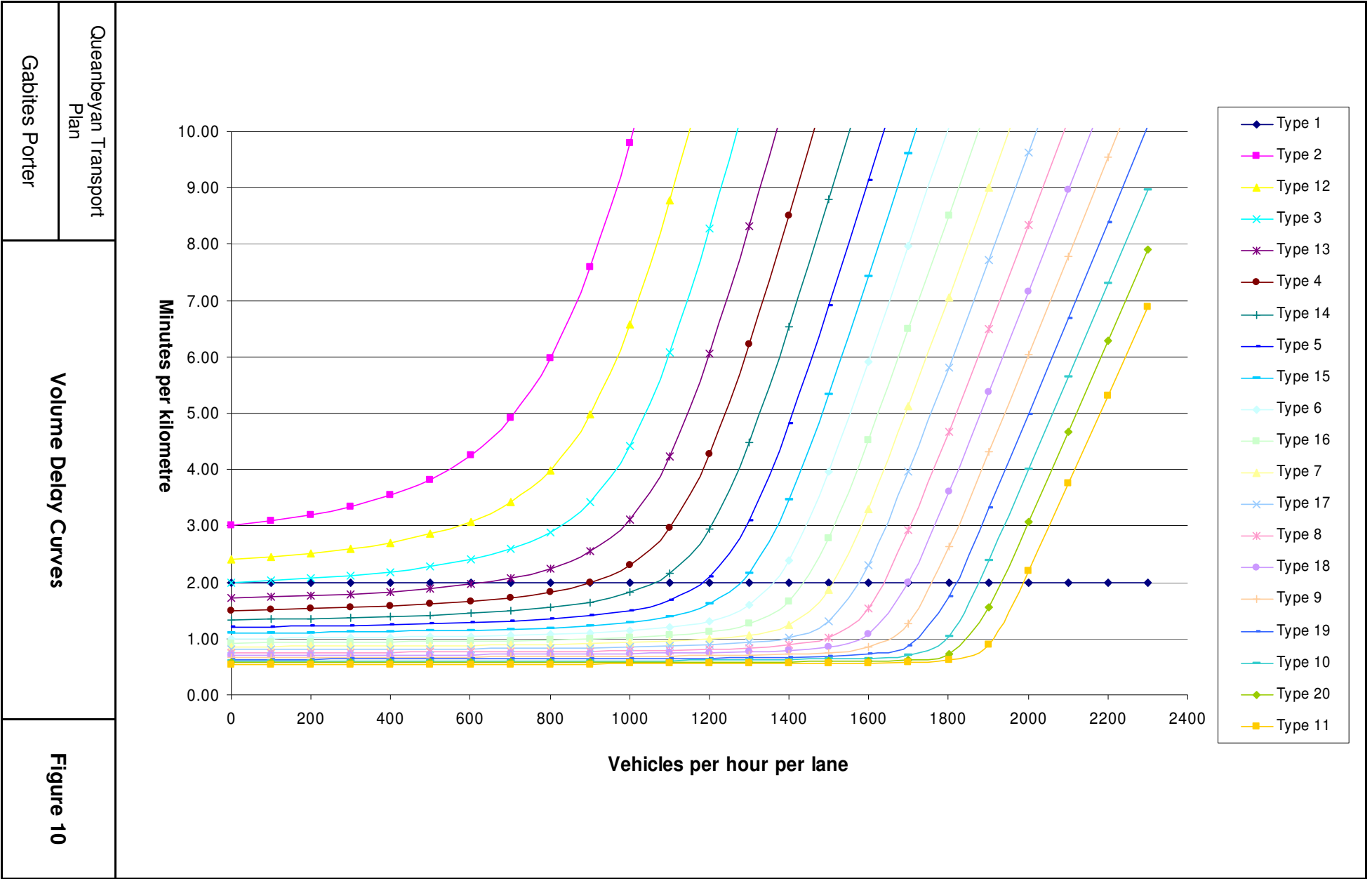
The volume/delay curves used for this study are shown in **Figure 10**. The link type refers to the number code allocated to each road link. The numbers loosely follow the free flow speed on a link where:

- 5 = 50 km/hr free flow speed
- 6 = 60 km/hr free flow speed

Where 10 is added to the link type it represents the free flow speed plus 5 km/hr, i.e.

- 16 = 65 km/hr free flow speed

Link type 1 is used for all centroid connectors and hence has a flat profile.



8.3 Network Intersections

The coding adopted in TRACKS to represent the different types of intersections were:

Type 0	-	Not controlled, has priority
Type 1	-	No controls marked, non priority
Type 2	-	Merge
Type 3	-	Roundabout
Type 4	-	Give Way
Type 5	-	Stop
Types 6,7	-	Signals
Types 8,9	-	Signals

8.3.1 Priority Intersections

Delays at priority intersections are calculated at the movement level. That is, left, right and through movements on all legs have delays calculated specifically.

The approach lanes at each intersection are coded as one of eight movement types as shown below. From the intersection geometry, determined from the link coordinates, the opposing traffic flows are calculated.

1. Left, Through and Right
2. Left and Right
3. Left
4. Left free
5. Left and Through
6. Through
7. Through and Right
8. Right

The way each lane type was treated came from the publication titled, "Performance Analysis of Priority Intersections - A Practitioner's Guide" by Gabites Porter: (1991).

A queuing theory model determined the delays. The queuing theory formulation adopted is that described by Fisk:(1989), which uses an M/M/1 model (indicates a queuing system with negative exponential distributions for arrival headway and service times, with one service channel) and a coordinate transformation approximation to allow for over saturated conditions.

The formulation is:

$$d = \frac{r/\mu (1 - r)}{(r - 1) t/2}$$

steady state conditions, $r < 1$
deterministic conditions, $r > 1$

Where:

$$r = q_2 / \mu$$

$$\mu = \frac{q_1 e^{-q_1 t}}{1 - e^{-q_1 b}}$$

t = duration of time period over which a steady state is assumed

q_1 = major road flow rate

q_2 = minor road flow rate, always defined as approach being delayed

t = critical gap

b = move-up time for minor road traffic.

μ = mean service rate

r = traffic intensity

Fisk shows that the delay equation can be written:-

$$d = \frac{-(2 + \mu t - r \mu t) + \sqrt{(2 + \mu t - r \mu t)^2 + 8r \mu t}}{4\mu} + \frac{1}{\mu}$$

when the coordinate transform is included and this formulation is used in the assignment model.

The following critical gaps and move-up times were used:

Critical gap and move up time values		Table 17
Lane Type	Critical Gap (sec)	Move-up Time (sec)
Left turn-non-priority	5.0	3.0
Left turn-priority	5.0	3.0
Thru/Right-non-priority	5.0	3.0
Thru/Right-priority	5.0	3.0
Merge	3.0	2.0
Roundabout	4.0	2.5
Bottleneck	3.0	2.0

Other parameters used include:

Tracking Headway	1.2 seconds
Lane Sharing Convergence Parameter	0.01
Number of external iterations	50
Number of internal iterations (lane sharing algorithm)	200

8.3.2 Signalised Intersections

Movement using the formulations in ARR123, including eqn 6.4, 6.3 and 6.1 shown below, calculates delays at signalised intersections. While ARR123 is the basis for SIDRA it does not give exactly the same results, especially for the more recent versions of SIDRA.

A general formula for the average delay per vehicle, d (in seconds) is

$$d = D/q \quad \text{eqn (6.4)}$$

D = total delay (veh/hr/hr)

q = flow rate (veh/s)

$$D = \frac{qc(1-u)^2}{2(1-y)} + N_0x \quad \text{eqn (6.3)}$$

Where:

qc = average number of arrivals in vehicles/cycle

q = flow (veh/sec)

c = cycle time (sec)

u = green time ratios = g/c

y = flow ratio = q/s

s = saturation flow (veh/sec)

N_0 = average overflow queue (vehicles)

x = q/Q = degree of saturation

$$N_0 = \begin{cases} \frac{QT_f}{4} \left[z + \sqrt{z^2 + \frac{12(x-x_0)}{QT_f}} \right] & \text{for } x > x_0 \\ 0 & \text{for } x \leq x_0 \end{cases} \quad \text{eqn (6.1)}$$

Where:

Q = capacity (veh/hr)

T_f = flow period (hours)

z = $x - 1$

x_0 = degree of saturation below which the average overflow queue is approximately zero = $0.67 + sg/600$

Signalised intersections were modelled specifically and each required a SIDRA input data file.

8.3.3 Geometric Delays

The delays calculated above are the stopped delays for vehicles. As vehicles decelerate to stop or negotiate a corner a geometric delay is encountered. The geometric delay is calculated from the formulations in Gabites Porter: (1991).

where:

- Q = capacity (veh/hr)
- Tf = flow period (hours)
- z = $x - 1$
- xo = degree of saturation below which the average overflow queue is approximately zero = $0.67 + sg/600$

9. MODEL CONVERGENCE

9.1 Assignment and Distribution Loop

Time and distance matrices are required as inputs for trip distribution. As assigning the trips to the network generates these matrices, after each assignment the trip distribution needs to be re-run and the trips re-assigned until the time and distances matrices converge.

In practice, it is unlikely that absolute convergence occurs. The assignment and distribution steps are run iteratively until the totals of both the time and distance matrices between successive runs remain close to each other and relatively constant.

The totals for the time and distance matrices for successive runs are shown below in **Table 18** where:

TVM = Total Vehicle Minutes

TVK = Total Vehicle Kilometres

Model Convergence Results				Table 18
PERIOD	AM Peak Kilometres	AM Peak Minutes	PM Peak Kilometres	PM Peak Minutes
Previous Run	1063800	1435935	1156337	1535111
Final Run	1063656	1435967	1156246	1535344
Difference	144	32	91	233
% Difference	0.01%	0.002%	0.008%	0.02%

The percentage change in generalised user cost between consecutive loops should be less than 1%. As the total vehicle minutes and total vehicle kilometres change less than 1% between runs (shown above), and unit time and distance costs are constant between runs, generalised user cost also changes less than 1% between runs.

When validating the model it is difficult to get a long series of runs prior to convergence because of the continual changing of the model components to get a better fit, even though these changes were often small. In general the model re-converged after two or three iterations. The periods were then run several times after convergence and remained stable.

For any model, if the network is heavily congested, convergence may not occur. Although the network is currently stable, when any changes are made to the network (e.g. option testing or land use), then convergence must be checked to ensure the network is still stable. In the unlikely event of the network not stabilising, modifications will have to be made to the network so that it will converge. These modifications should then be incorporated into the option or year being tested.

10. VALIDATION

10.1 General

The fundamental purpose of a transportation model is to simulate what is actually happening on the road network. Hence the model validation must illustrate that the output traffic flows and speeds reflect “reality” within the margins of error of the model. The fact that “reality” is a surveyed entity of only a sample of the annual travel pattern introduces further margins of error to be considered. The following criteria have been adapted for the purposes of this study.

10.2 Traffic Volumes

Validation of the model requires that the output traffic volumes from the model approximate what occurs in reality.

To check this a number of screenlines are drawn across the study area to capture the major traffic patterns that are occurring. Each Screenline contains a number of traffic counts, which are then compared to the modelled flows to check that the model is representing the observed traffic flows realistically. To compare the modelled traffic volumes against actual traffic counts the TRACKS program CORDON is used.

It is intended that the sum of the traffic at each cordon or Screenline should closely match the observed totals. It is preferred that each individual link within a cordon closely matches the counts but this is less likely as individual counts are highly variable and do not all occur at the same time. Individual links are more affected by local conditions such as:

1. Speed and capacity (link specific)
2. Intersection delays
3. Zone Centroid locations
4. Special generators (near specific link)
5. Local network configuration

In some situations these factors cannot be avoided and must be considered when assessing individual link comparisons. Where the traffic volume on a link is low it does not take a very big difference between counted and modelled flows to show a large percentage difference. Where traffic flows are low the significance of the link and the absolute volume difference must be considered.

10.2.1 Measures of Validity

Network flow comparisons are tested using a number of statistical measures. Traffic counts were grouped into cordons, or screenlines, and the following measures calculated:

- Comparisons of individual links
- Comparisons of total trips over each group
- Percentage difference
- Correlation coefficient
- % Root mean square
- GEH.

Guidelines for each of the above criteria were obtained from Transfund NZ Project Evaluation Manual and listed in **Table 19**. An intermediate GEH criteria for screenlines has been added by Gabites Porter for instances where the GEH falls between 5 and 10. This is to give a better understanding of individual screenline validation especially where a screenline has only just failed to meet the <5 criteria.

The correlation coefficient is a first order measure of the co-relation, using the formula:

$$P_{x,y} = \frac{\frac{1}{n} \sum (x_i - \bar{x}_i) (y_i - \bar{y}_i)}{\sigma_x \sigma_y}$$

Where:

- Σ = Sum of...
- x = Variable X (observed traffic)
- x_i = The mean of variable x (observed traffic)
- y = Variable y (modelled traffic)
- y_i = The mean of y (modelled traffic)
- σ_x = The standard deviation of x (observed traffic)
- σ_y = The standard deviation of y (modelled traffic)
- n = Number in sample

The *GEH* is a form of the Chi-squared statistic that incorporates both relative and absolute errors. It is designed to be more tolerant of the large percentage differences in lower flows. The form of the statistic is:

$$GEH = \sqrt{\frac{2(m-o)^2}{m+o}}$$

Where m is the modelled flow and o is the observed count.

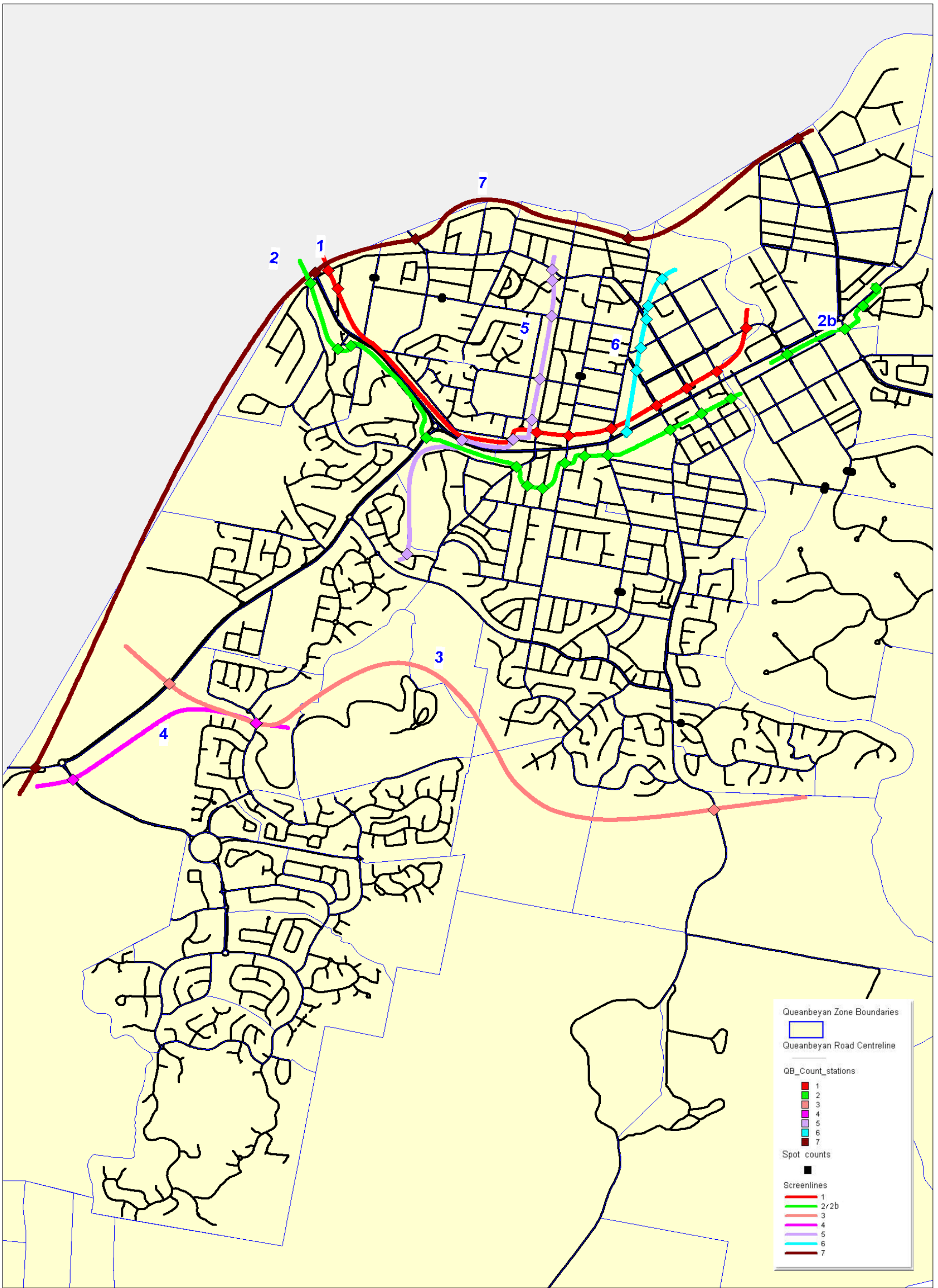
Peak Hour Model Validation Guidelines			Table 19	
Screenline Totals				
Traffic Flow	± 10%			
R ²	Generally >0.85 but Preferably >0.95			
Correlation Coefficient	>0.8			
GEH	Generally <4			
Individual Links (vpd)				
0-10,000	± 60%	± 300		
10-20,000	± 40%	± 400		
20-30,000	± 30%	± 600		
30-50,000	± 20%	± 750		
50,000 +	± 20%	± 1,000		
% RMS	Generally <30			
GEH	<5	<7**	<10	<12
(modified for 1hr flows only)	60%	80%	95%	100%

**Gabites Porter intermediate guideline

The screenlines used in the validation of the model are shown in **Figure 11**.

The counts and volumes of these screenlines are summarised below in **Table 20** and **Table 21** with full cordon output files included with this report as **Appendix 3**.

Scatterplots for all links in each period are shown in **Figure 12**.



AM Peak Network Validation

Table 20

Group 1 – North of Canberra Ave*****1				
Count	3066			
Volume	3172			
Change	106			
%	103			
Correlation Coefficient	0.960			
%RMS	18.06			
GEH Total	1.9			
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	88.9	100.0	100.0	100.0
Group 2a – South of Canberra Ave*****1				
Count	4853			
Volume	5154			
Change	301			
%	106			
Correlation Coefficient	0.990			
%RMS	14.15			
GEH Total	4.3			
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	75.0	100.0	100.0	100.0
Group 2b – South of Canberra Ave				
Count	2477			
Volume	2596			
Change	119			
%	105			
Correlation Coefficient	0.998			
%RMS	8.81			
GEH Total	2.4			
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	100.0	100.0	100.0	100.0
Group 3 – South Queanbeyan				
Count	2398			
Volume	2391			
Change	-7			
%	100			
Correlation Coefficient	0.991			
%RMS	7.66			
GEH Total	0.1			
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	83.3	100.0	100.0	100.0

Table 20 Continued

Group 4 – Jerrabomberra South				
Count				1573
Volume				1540
Change				-33
%				98
Correlation Coefficient				1.000
%RMS				4.20
GEH Total				0.8
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	100.0	100.0	100.0	100.0
Group 5 – East / West Queanbeyan				
Count				4068
Volume				3932
Change				-136
%				97
Correlation Coefficient				0.993
%RMS				12.99
GEH Total				2.2
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	78.6	100.0	100.0	100.0
Group 6 – West of CBD*****¹				
Count				4236
Volume				4111
Change				-125
%				97
Correlation Coefficient				0.984
%RMS				15.02
GEH Total				1.9
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	75.0	100.0	100.0	100.0
Group 7 – ACT Border				
Count				8158
Volume				8430
Change				272
%				103
Correlation Coefficient				0.998
%RMS				6.82
GEH Total				3.0
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	91.7	100.0	100.0	100.0

Table 20 Continued

Group 8 – Miscellaneous				
Count				1324
Volume				1304
Change				-20
%				98
Correlation Coefficient				0.864
%RMS				34.59
GEH Total				0.6
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	92.9	100.0	100.0	100.0
All Counts*****1				
Count				32227
Volume				32630
Change				403
%				101
Correlation Coefficient				0.992
%RMS				12.27
GEH Total				2.2
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	84.9	99.1	100.0	100.0

Note ***1**

These screenlines were affected by CBD parking movements on and around Crawford and Collett Streets. The location of off-street and on-street parking, access to and from parking areas and the build up of parking during the off-peak period (which has not been fully validated) greatly affected the level of vehicle movements on these roads. To improve these to the level they are now showing a special variable was introduced to the trip generation and distribution which mimicks parking circulation and provided the additional trips in the CBD that were lacking.

PM Peak Network Validation

Table 21

Group 1 – North of Canberra Ave*****1				
Count				3820
Volume				3978
Change				158
%				104
Correlation Coefficient				0.955
%RMS				18.91
GEH Total				2.5
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	94.4	100.0	100.0	100.0
Group 2a – South of Canberra Ave*****1				
Count				5406
Volume				5673
Change				267
%				105
Correlation Coefficient				0.989
%RMS				14.20
GEH Total				3.6
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	70.0	95.0	100.0	100.0
Group 2b – South of Canberra Ave				
Count				2974
Volume				3051
Change				77
%				103
Correlation Coefficient				0.989
%RMS				13.98
GEH Total				1.4
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	87.5	100.0	100.0	100.0
Group 3 – South Queanbeyan				
Count				2527
Volume				2583
Change				56
%				102
Correlation Coefficient				0.935
%RMS				15.48
GEH Total				1.1
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	83.3	100.0	100.0	100.0

Table 21 Continued

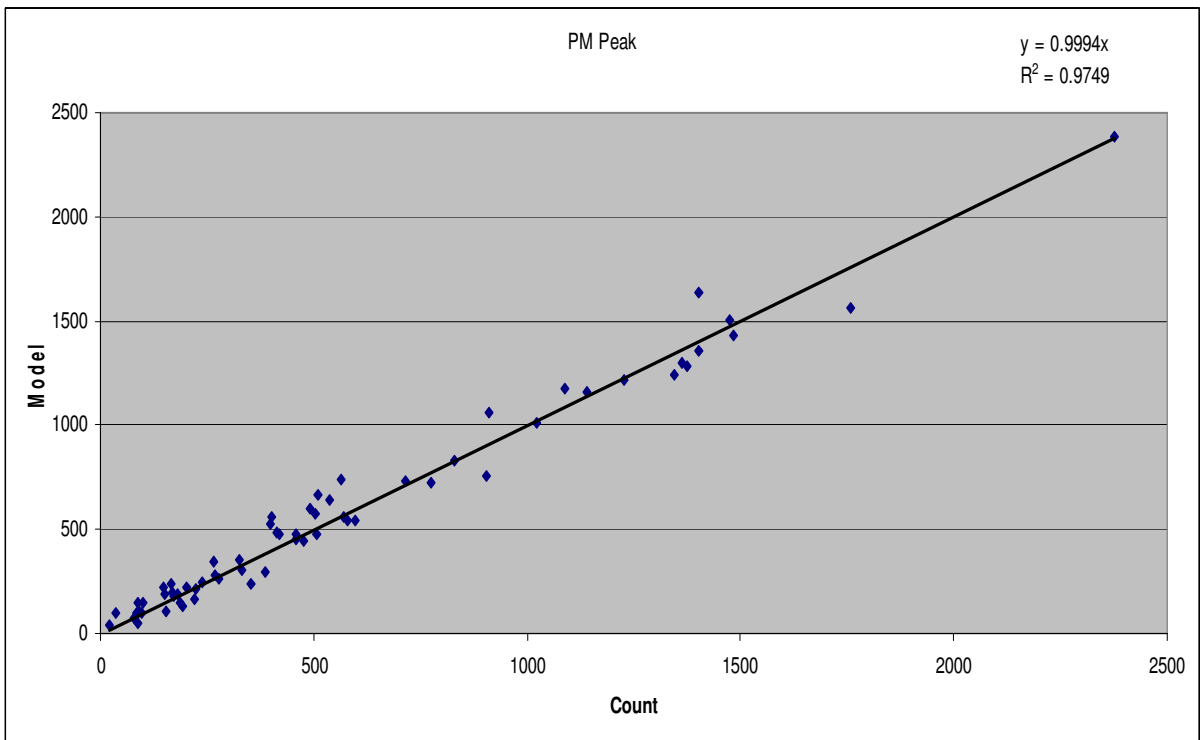
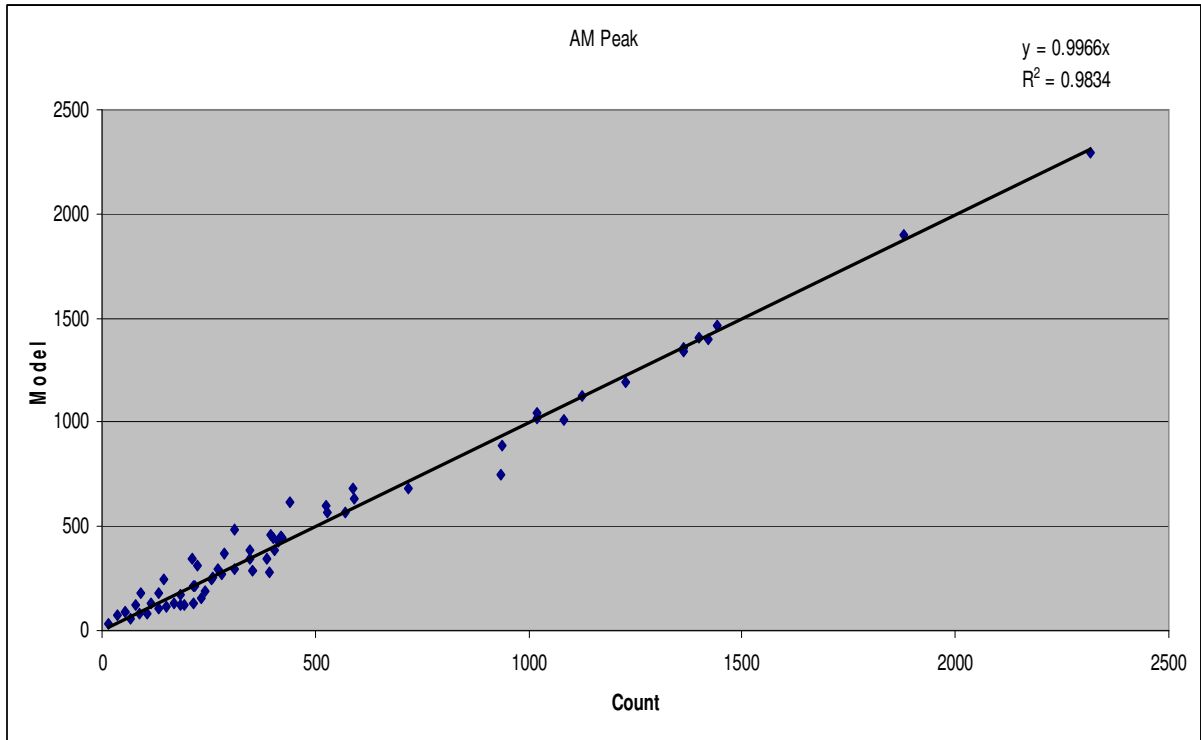
Group 4 – Jerrabomberra South				
Count				1879
Volume				1855
Change				-24
%				99
Correlation Coefficient				1.000
%RMS				12.33
GEH Total				0.6
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	100.0	100.0	100.0	100.0
Group 5 – East / West Queanbeyan				
Count				4262
Volume				4399
Change				137
%				103
Correlation Coefficient				0.997
%RMS				9.69
GEH Total				2.1
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	92.9	100.0	100.0	100.0
Group 6 – West of CBD*****¹				
Count				5046
Volume				4810
Change				-236
%				95
Correlation Coefficient				0.990
%RMS				11.60
GEH Total				3.4
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	91.7	100.0	100.0	100.0
Group 7 – ACT Border				
Count				8418
Volume				8611
Change				193
%				102
Correlation Coefficient				0.980
%RMS				12.84
GEH Total				2.1
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	91.7	100.0	100.0	100.0

Table 21 Continued

Group 8 – Miscellaneous				
Count				1432
Volume				1560
Change				128
%				109
Correlation Coefficient				0.948
%RMS				32.11
GEH Total				3.3
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	85.7	100.0	100.0	100.0
All Counts*****1				
Count				35764
Volume				36520
Change				756
%				102
Correlation Coefficient				0.988
%RMS				13.91
GEH Total				4.0
GEH Link Grouping	<5	<7	<10	<12
% in GEH Group	86.8	99.1	100.0	100.0

Note ***1**

These screenlines were affected by CBD parking movements on and around Crawford and Collett Streets. The location of off-street and on-street parking, access to and from parking areas and the build up of parking during the off-peak period (which has not been fully validated) greatly affected the level of vehicle movements on these roads. To improve these to the level they are now showing a special variable was introduced to the trip generation and distribution which mimicks parking circulation and provided the additional trips in the CBD that were lacking.



Queanbeyan Transport Plan	All Counts Scatterplots	Figure 12
Gabites Porter		

10.3 Flows Diagrams

The **Figure 13** to **Figure 16** below show the traffic flows given by the model for the three periods.

VOLUME KEY

- (Survey volume)
- Model volume [below survey]
- Model volume [above survey]

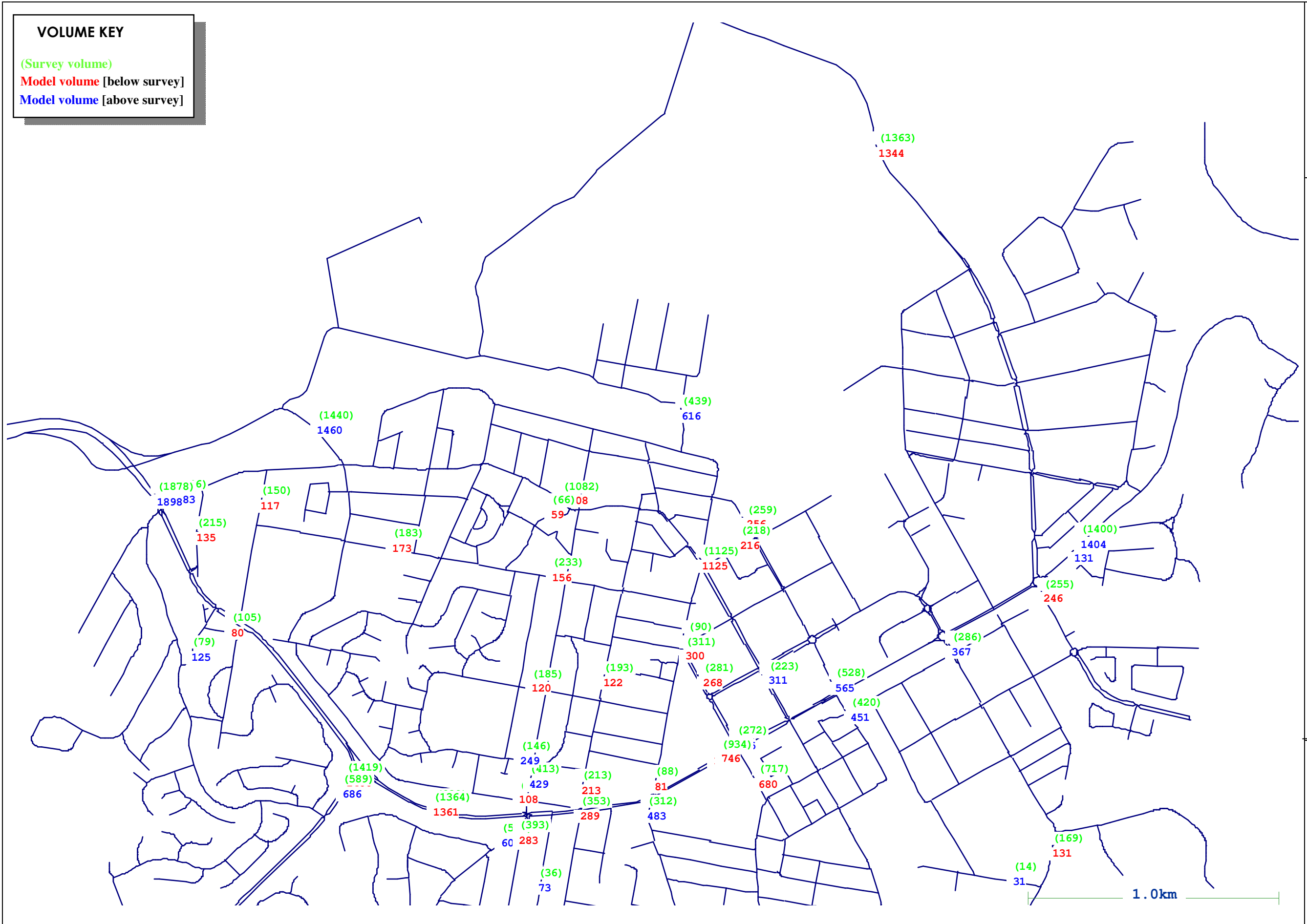
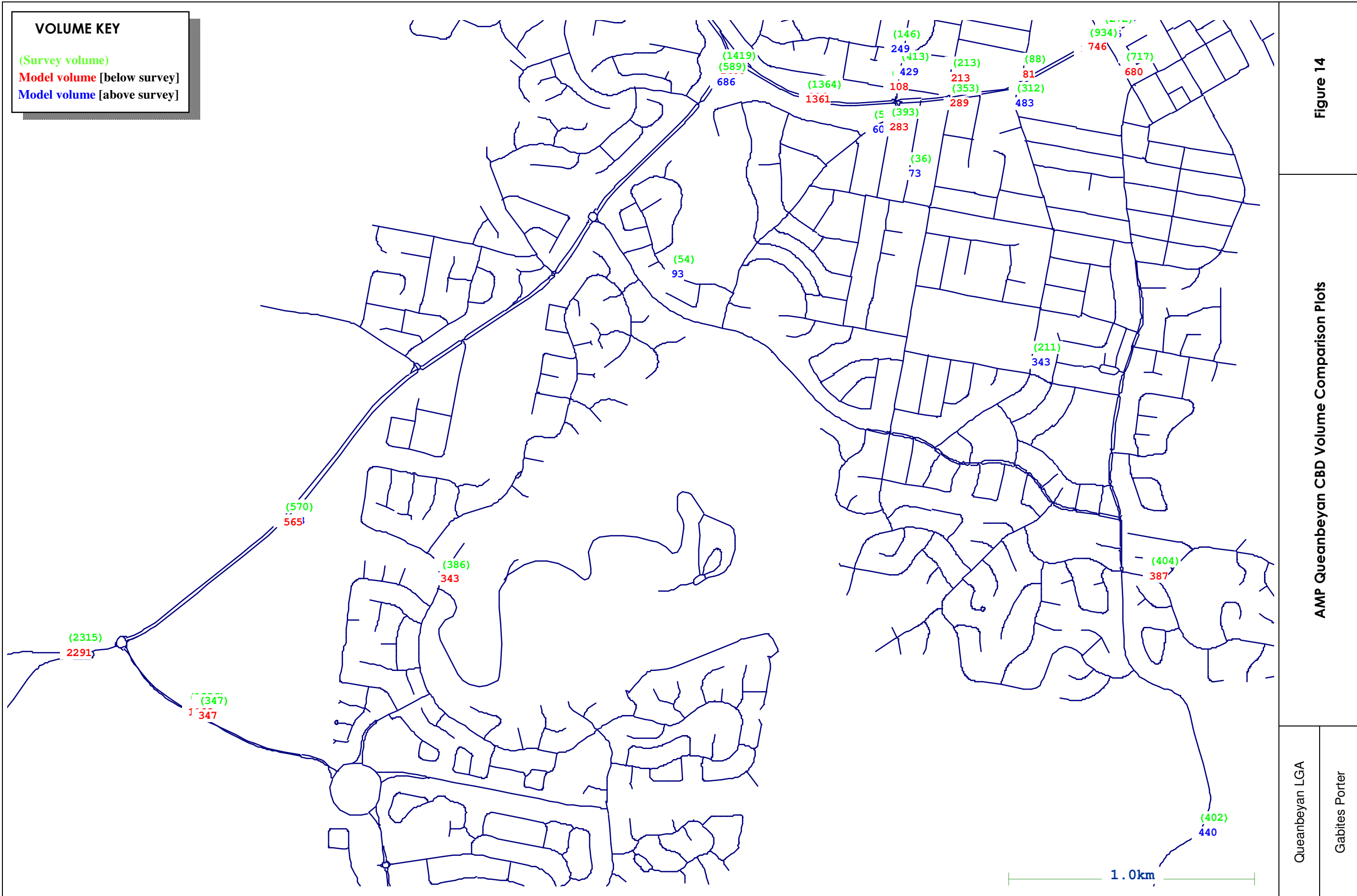


Figure 13

AMP South Queanbeyan Volume Comparison Plots

Queanbeyan Transport Plan

Gabites Porter



VOLUME KEY

- (Survey volume)
- Model volume [below survey]
- Model volume [above survey]

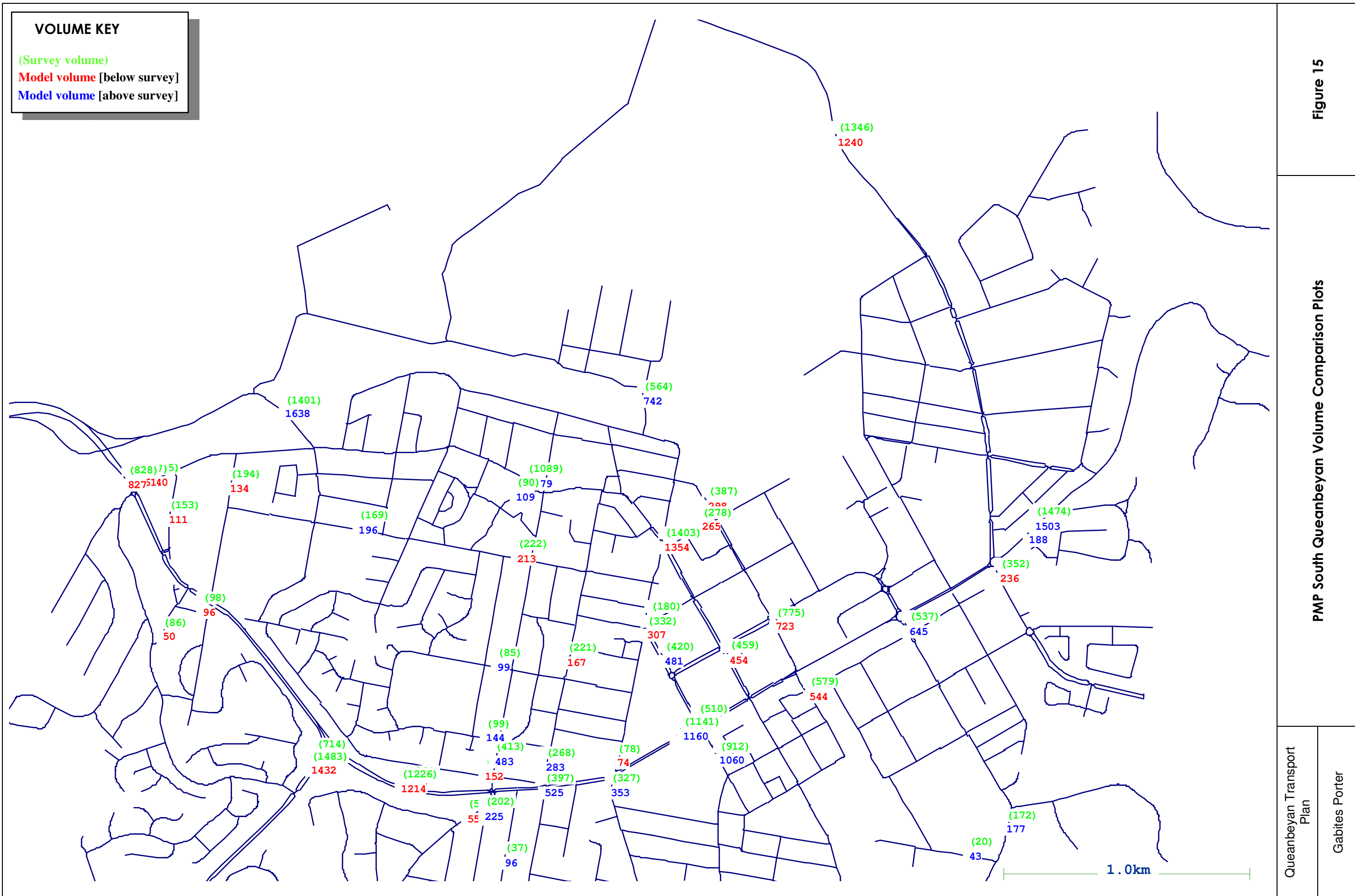


Figure 15

PMP South Queanbeyan Volume Comparison Plots

Queanbeyan Transport Plan

Gabites Porter

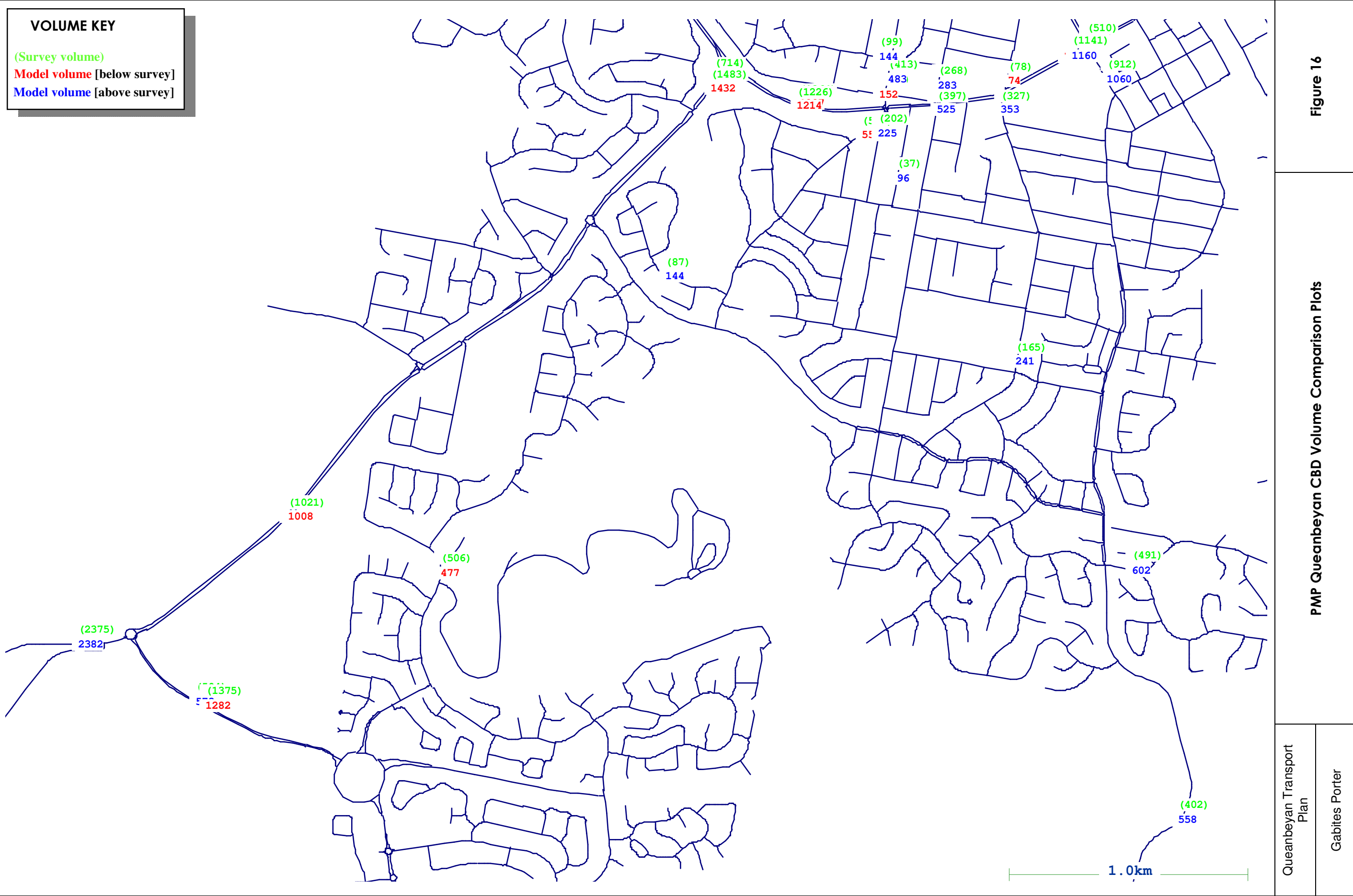


Figure 16

PMP Queanbeyan CBD Volume Comparison Plots

Queanbeyan Transport Plan

Gabites Porter



Figure 17

AMP South Queanbeyan Volume Plots

Queanbeyan Transport Plan

Gabites Porter



Figure 19

PMP North Queanbeyan Volume Plots

Queanbeyan Transport Plan

Gabites Porter

10.3.1 Travel Time Calibration and Validation

The travel time validation determines the appropriate link types, or link speed in the modelled network. Link types along all surveyed routes are iteratively selected to consistently produce modelled travel times within the acceptable margin of error as defined by the survey variation. The routes taken are shown in **Figure 21** to **Figure 24**.

The difference between surveyed times and modelled times for the morning peak and evening peak are summarised in **Table 22** and **Table 23** respectively. The model data is compared to the Upper and Lower interval figures but it should be noted that the surveyed times are from 2006 since no recent survey data is available, and so has been included only as a guide of travel time in the model. All data shown were obtained from the list files attached as **Appendix 4** of this report.

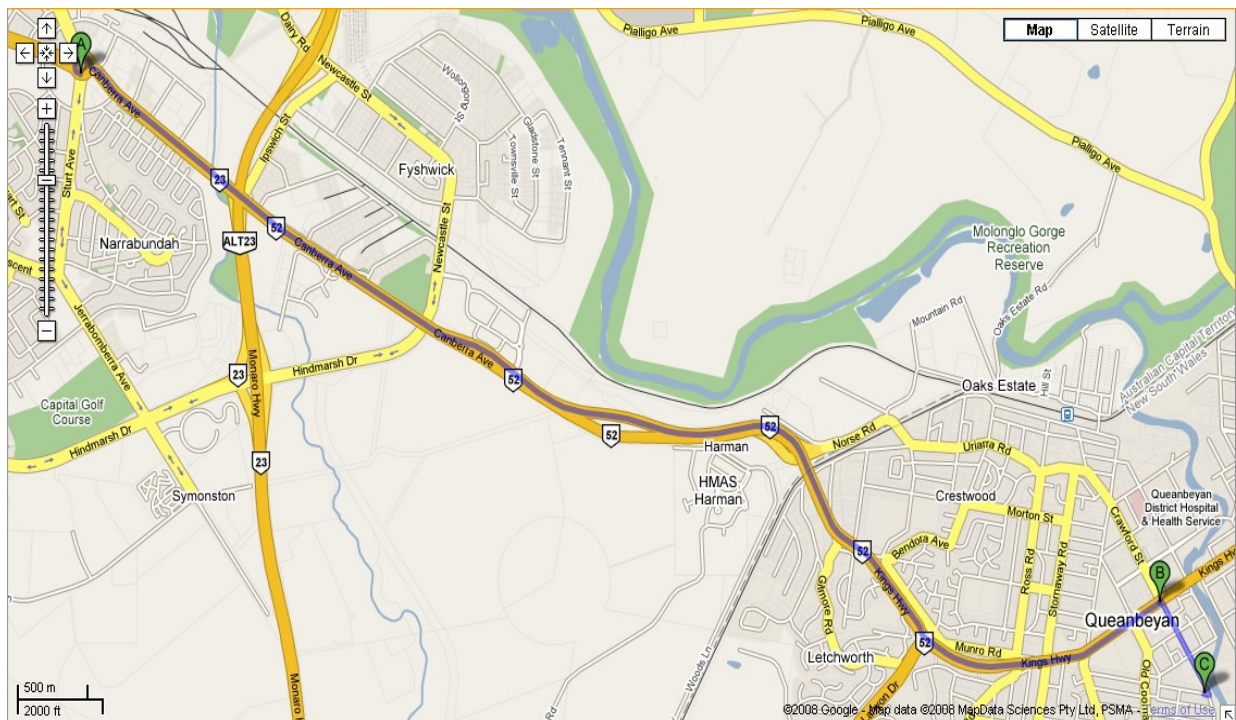
Morning Peak Travel Time Validation						Table 22
Route	Distance	Survey			Model	OK?
		Mean	Lower	Upper		
Route 1 - Eastbound	8671m	638	560	727	725	OK
Route 1 - Westbound	8713m	671	650	750	809	+7%
Route 2 - Eastbound	4069m	368	325	393	325	OK
Route 2 - Westbound	4436m	392	350	427	412	OK
Route 3 - Eastbound	10997m	744	705	770	768	OK
Route 3 - Westbound	10885m	711	668	757	843	+10%
Route 4 - Northbound	4972m	305	270	360	318	OK
Route 4 - Southbound	5025m	276	273	278	255	-7%

Evening Peak Travel Time Validation						Table 23
Route	Distance	Survey			Model	OK?
		Mean	Lower	Upper		
Route 1 - Eastbound	8671m	707	637	765	711	OK
Route 1 - Westbound	8713m	716	604	860	718	OK
Route 2 - Eastbound	4069m	347	325	365	339	OK
Route 2 - Westbound	4436m	340	305	422	410	OK
Route 3 - Eastbound	10997m	739	695	797	774	OK
Route 3 - Westbound	10885m	889	705	1015	848	OK
Route 4 - Northbound	4972m	270	265	272	272	OK
Route 4 - Southbound	5025m	295	267	335	295	OK

The majority of travel time routes were within the variation bounds of the surveyed data. On three instances the modelled journey time were outside the surveyed results but is expected when comparing to 2006 survey times. For the two routes that were high, ie travelling longer, this could be expected due to the 2011 network being busier. The route that is low, ie running faster, is on Lanyon Drive which has been four-laned since the 2006 survey.

Route 1

Canberra – Queanbeyan via Canberra Avenue



East bound (Canberra to Queanbeyan)

Start when exiting SH23 / Stuart Ave / Wentworth Ave RAB, travel down Canberra Ave towards Queanbeyan, through to Monaro St (Kings Hwy), then turn right into Crawford St, finish at Thorpe Ave / Hirst Ave intersection.

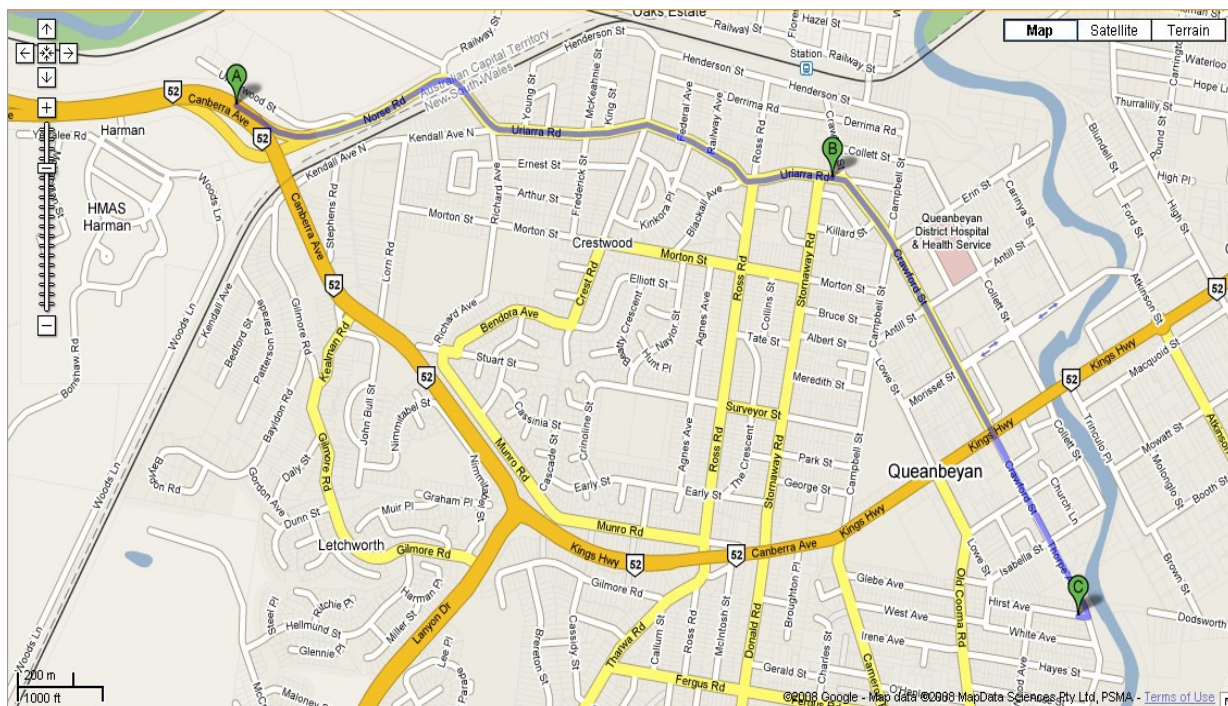
West bound (Queanbeyan to Canberra)

Start Thorpe Ave / Hirst Ave intersection, travel up Crawford St, turn left at Monaro St (Kings Hwy) and follow Canberra Ave finishing at SH23 / Stuart Ave / Wentworth Ave RAB.

Queanbeyan Transport Plan	Travel Time Survey Route 1	Figure 21
Gabites Porter		

Route 2

Canberra ACT boundary – Queanbeyan via Uriarra Rd



East bound (Canberra ACT boundary to Queanbeyan)

Canberra Ave off ramp to Norse Rd, then turn right into Uriarra Rd, follow Uriarra Rd to Crawford St, travel down Crawford Rd finishing at Thorpe Ave / Hirst Ave intersection.

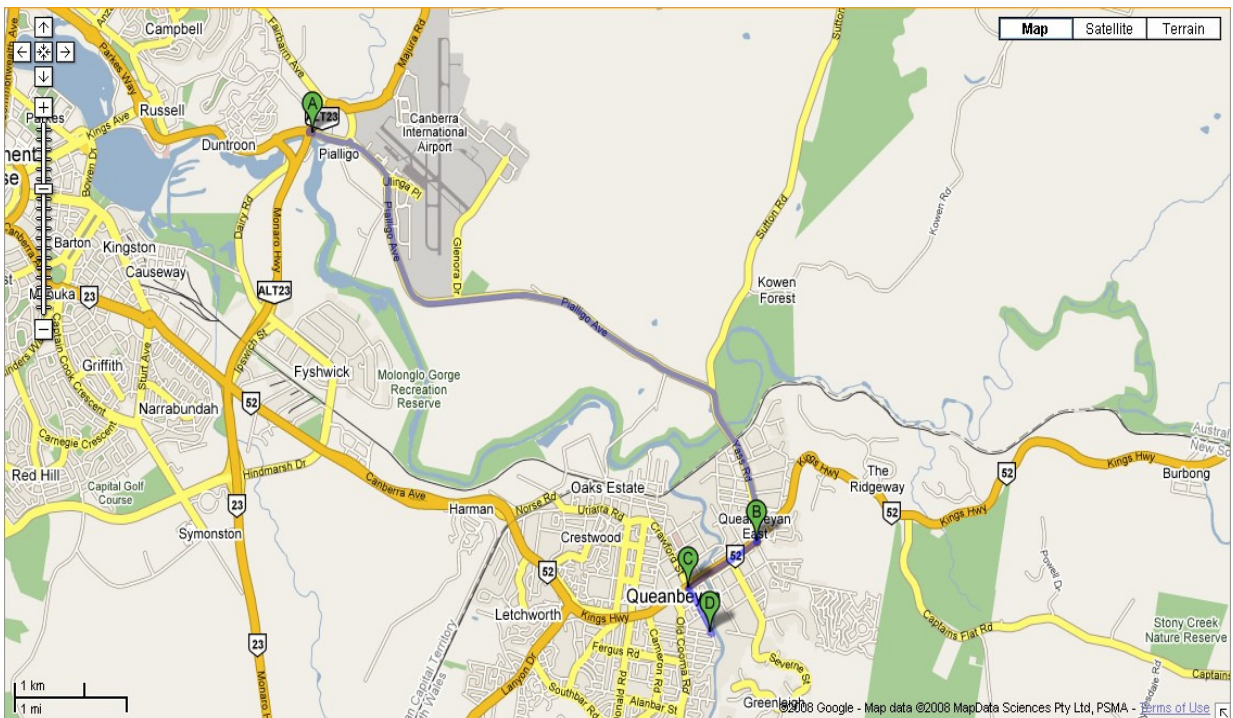
West bound (Queanbeyan to Canberra)

Thorpe Ave / Hirst Ave intersection, travel up Crawford St to Uriarra Rd, follow Uriarra Rd to Norse Rd finishing at the Canberra Ave on ramp.

Queanbeyan Transport Plan	Travel Time Survey Route 2	Figure 22
Gabites Porter		

Route 3

Canberra Airport – Queanbeyan via Yass Rd



East bound (Canberra Airport to Queanbeyan)

Start when exiting Pialligo Ave / Dairy Rd / Morshead Dr RAB, travel down Pialligo Ave to Yass Rd, turn right into Bungendore Rd (Kings Hwy), travel across the bridge, then right into Crawford St, finishing at Thorpe Ave / Hirst Ave intersection.

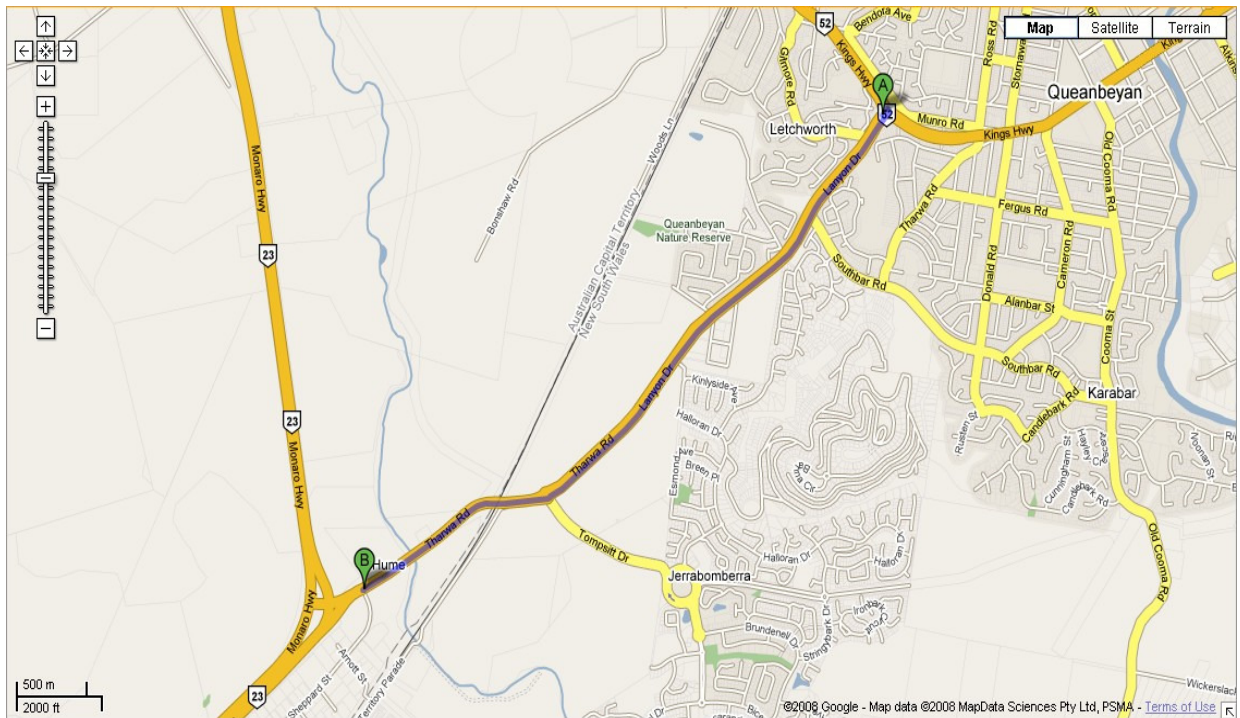
West bound (Queanbeyan to Canberra Airport)

Start Thorpe Ave / Hirst Ave intersection, travel up Crawford St, turn right at Monaro St (Kings Hwy), travel across the bridge, left into Yass Rd, then follow Pialligo Ave finishing at Pialligo Ave / Dairy Rd / Morshead Dr RAB.

Queanbeyan Transport Plan	Travel Time Survey Route 3	Figure 23
Gabites Porter		

Route 4

Canberra Sth – Queanbeyan via Lanyon Dr



North bound (Canberra Sth to Queanbeyan)

Start at Tharwa Rd / Sheppard St intersection, travel up Tharwa Rd into Lanyon Dr, finishing at the Canberra Ave / Lanyon Dr RAB.

South bound (Queanbeyan to Canberra Sth)

Start Canberra Ave / Lanyon Dr RAB, travel down Lanyon Dr into Tharwa Rd finishing at Tharwa Rd / Sheppard St intersection.

Queanbeyan Transport Plan	Travel Time Survey Route 4	Figure 24
Gabites Porter		

10.4 General Discussion

As a prerequisite to using a transportation model to test road network and land use options, the model must be validated such that the model must be seen to be a close match to "reality".

"Reality" as termed here is illustrated by observed values of such variables as traffic counts, and origin destination surveys. In measuring "reality" there are a number of inherent difficulties. These can be caused by:

- a) the variability of "reality" due to the nature of human behaviour.
- b) the methods used to survey "reality".

The first point tells us that there is no such thing as a typical or average day. There will never be a day where every vehicle driver makes exactly the same trips at exactly the same time as any other day. That said we are at best trying to simulate indicative travel patterns.

The second point is that survey techniques can have a significant amount of error. For example, a vehicle travelling very slowly over a traffic counter tube will register a count differently to one travelling at a normal speed. Such difficulties are minimised by careful selection of traffic counter placements but cannot be fully avoided.

A document put out by the US Department of Transportation titled "Calibration and Adjustment of System Planning Models", December 1990 summarises validation as follows.

"...A regional transportation planning model consists of a complex series of steps with many built-in assumptions. When validating a model, one should not be overly optimistic about matching the simulated volume to ground counts...."

A word of caution: *When comparing forecasted volumes to ground counts, it is important to recognise that the ground counts probably contain a significant amount of error.*

Traffic volumes vary greatly by season and by day of week. Count errors can be caused by variation in the mix of vehicles in the traffic stream. Regularly occurring local events, special events, and accidents can destroy the counts on large portions of the highway system. Errors can also be due to mechanical counter failure, field personnel mistakes, or improper counter location. Procedures have been developed to help correct for some of this variation, but these procedures are imperfect. There is often no way to ensure that ground counts correspond to the same time period as base-case socio-economic data.

Base-case ground counts should be thought of as approximations of existing traffic, just as the base-case model estimate is an approximation to existing traffic."

This model has been created to, as closely as possible, replicate the traffic movements within the Queanbeyan LGA during a typical weekday in 2006 based on available traffic data.

Gabites Porter believes that the model building aspect of this project has been done in full accordance with the project brief and satisfies standard model validation criteria.

10.5 Further Model Considerations

Some screenlines were affected by CBD parking movements on and around Crawford and Collett Streets but the inclusion of a special variable to simulate parking circulation has improved this area somewhat in all but one of the screenlines (and in one period only). The location of off-street and on-street parking, access to and from parking areas and the build up of parking during the off-peak period (which has not been modelled) affects the level of vehicle validation on these roads.

The ability to redistribute trips according to parking destination and modelling of an interpeak parking period would improve flow validation, in the PM Peak period in particular, within the CBD area. This however could only be implemented with the inclusion of a parking redistribution module within the modelling process and the creation of a validated Inter-peak period.

To include a parking module within the model would require a significant parking inventory and occupancy survey to be undertaken during the AM, Inter and PM periods.

The Queanbeyan model has been created with the possibility of a future parking module in mind. Parking zones have been allowed for in the model network, land use distributed in such a way as to allow for the module to be included and the model parameter structure adapted to allow for the inclusion of the module.

Clearly the interaction between Queanbeyan and Canberra is significant. The current model includes all of the major elements of the ACT road network to better model this interaction. However, the ACT part of the model has not been rigorously validated. All reasonable attempts have been made to ensure that general major flows within the ACT network reasonably replicate existing but this is not the same as validation.

All Intersection delays, signal timings and 2006 network flow validation have not been undertaken as part of this model build. The interaction between the two areas could only be improved with a fully validated ACT network.

Having said that, the ACT part of this model uses the existing ACT EMME/2 model zone structure, road centrelines, currently implemented land use data and replicates very closely the trip length distribution of the 1997 ACT HIS.

REFERENCES

- Akcelik:1 Akcelik, R., Travel Time Functions for Transportation Planning Purposes. Australian Road Research, 21(3), September 1991.
- Akcelik:2 Akcelik, R., The Highway Capacity Manual Formula for Signalised Intersections. ITE Journal, March 1988, Vol. 58, No. 3.
- Fisk:1 Fisk, C.S., Link Travel Time Functions for Traffic Assignment. Department of Civil Engineering, University of Auckland.
- Fisk:2 Fisk, C.S., and Tan H.H., Delay Analysis for Priority Intersections. Department of Civil Engineering, University of Auckland, 1989.

APPENDICES



Appendix One - TRACKS Zone Equivalence

Tracks Zone	HH %age of SA1	Job %age of SA2	SA1 Area	SA2 Area
51		0.8%		101021009
52		0.8%		101021009
53		2.2%		101021009
54		1.0%		101021009
55		0.8%		101021009
56		0.3%		101021009
57		0.3%		101021009
58		1.5%		101021009
59		2.2%		101021009
60		2.2%		101021009
61		1.5%		101021009
62		0.8%		101021009
63		1.9%		101021009
64		1.1%		101021009
65		1.5%		101021009
66		1.1%		101021009
67		1.1%		101021009
68		0.6%		101021009
69		0.5%		101021009
70		0.7%		101021009
71		0.5%		101021009
72		0.6%		101021009
73		0.9%		101021009
74		0.7%		101021009
75		1.7%		101021009
76		0.8%		101021009
77		0.8%		101021009
78		1.6%		101021009
79		1.6%		101021009
80		1.6%		101021009
81		0.9%		101021009
82		1.2%		101021009
83		1.2%		101021009
84		0.9%		101021009
85		1.6%		101021009
86		0.9%		101021009
87		1.8%		101021009
88		0.6%		101021009
89		0.7%		101021009
90		1.2%		101021009
91		1.5%		101021009
92		1.2%		101021009
93		1.2%		101021009
94		1.2%		101021009
95		1.9%		101021009
96		0.8%		101021009
97		0.8%		101021009
98		0.8%		101021009
99		0.8%		101021009
100		0.8%		101021009

Tracks Zone	HH %age of SA1	Job %age of SA2	SA1 Area	SA2 Area
101	0%	0.0%	1100919	101021009
102	0%	0.0%	1100922	101021009
103	53%	2.2%	1100922	101021009
104	5%	0.0%	1100922	101021009
105	5%	0.0%	1100922	101021009
106	5%	0.0%	1100922	101021009
107	7%	0.0%	1100919	101021009
108	1%	0.0%	1100919	101021009
109	0%	0.0%	1100919	101021009
110	0%	0.0%	1100922	101021009
111	0%	0.6%	1100922	101021009
112	1%	0.0%	1100914	101021009
113	6%	0.0%	1100917	101021009
114	6%	0.0%	1100917	101021009
115	22%	0.4%	1100917	101021009
116	45%	0.5%	1100917	101021009
117	5%	7.7%	1100917	101021009
118	16%	0.6%	1100917	101021009
119	22%	0.0%	1100913	101021009
120	22%	0.0%	1100913	101021009
121	17%	0.0%	1100913	101021009
122	39%	0.0%	1100913	101021009
123	50%	0.0%	1100811	101021008
124	50%	0.0%	1100811	101021008
125	60%	0.0%	1100802	101021008
126	40%	0.0%	1100802	101021008
127	69%	0.0%	1100814	101021008
128	100%	0.0%	1100812	101021008
129	31%	0.0%	1100814	101021008
130	100%	0.0%	1100809	101021008
131	100%	0.0%	1100819	101021008
132	100%	0.0%	1100822	101021008
133	100%	0.0%	1100821	101021008
134	100%	5.3%	1100820	101021008
135	100%	0.0%	1100806	101021008
136	100%	0.0%	1100810	101021008
137	0	0.0%	1101225	101021012
138	0	0.0%	1101225	101021012
139	100%	0.0%	1101211	101021012
140	100%	0.0%	1101203	101021012
141	100%	3.2%	1101224	101021012
142	100%	0.0%	1101202	101021012
143	100%	0.0%	1101231	101021012
144	100%	0.0%	1101232	101021012
145	100%	0.0%	1101214	101021012
146	100%	0.0%	1101216	101021012
147	100%	2.7%	1101201	101021012
148	100%	3.2%	1101218	101021012
149	57%	0.0%	1101223	101021012
150	5%	18.7%	1101223	101021012

Tracks Zone	HH %age of SA1	Job %age of SA2	SA1 Area	SA2 Area
151	38%	0.0%	1101223	101021012
152	100%	0.0%	1101222	101021012
153	100%	0.0%	1101215	101021012
154	0%	15.4%	1101215	101021012
155	100%	0.0%	1101205	101021012
156	100%	2.6%	1101210	101021012
157	25%	0.0%	1101213	101021012
158	75%	0.0%	1101213	101021012
159	0	0.7%	1101217	101021012
160	100%	0.0%	1101209	101021012
161	100%	0.6%	1101207	101021012
162	100%	1.6%	1101230	101021012
163	0	22.9%	1101217	101021012
164	0%	15.6%	1101208	101021012
165	100%	0.0%	1101208	101021012
166	64%	0.4%	1101219	101021012
167	100%	0.4%	1101220	101021012
168	100%	0.8%	1100808	101021008
169	100%	9.2%	1100815	101021008
170	100%	0.0%	1100807	101021008
171	36%	8.3%	1101219	101021012
172	100%	0.4%	1100916	101021009
173	100%	2.1%	1100915	101021009
174	90%	1.1%	1100816	101021008
175	10%	57.6%	1100816	101021008
176	100%	0.0%	1100803	101021008
177	100%	26.0%	1100804	101021008
178	100%	0.0%	1100818	101021008
179	100%	0.0%	1100817	101021008
180	59%	0.0%	1100914	101021009
181	40%	0.0%	1100914	101021009
182	37%	1.0%	1100918	101021009
183	63%	0.0%	1100918	101021009
184	64%	0.0%	1100905	101021009
185	36%	3.7%	1100905	101021009
186	72%	0.0%	1100904	101021009
187	28%	0.0%	1100904	101021009
188	22%	0.0%	1100903	101021009
189	0%	5.3%	1100903	101021009
190	40%	1.4%	1100903	101021009
191	38%	3.7%	1100903	101021009
192	100%	0.0%	1100902	101021009
193	100%	0.0%	1100901	101021009
194	45%	0.0%	1100919	101021009
195	46%	0.0%	1100919	101021009
196	100%	1.5%	1100920	101021009
197	100%	0.7%	1100921	101021009
198	100%	0.0%	1100907	101021009
199	100%	2.0%	1100911	101021009
200	100%	1.0%	1100910	101021009
201	100%	2.9%	1100909	101021009
202	100%	1.6%	1100908	101021009
203	100%	3.5%	1100906	101021009

Tracks Zone	HH %age of SA1	Job %age of SA2	SA1 Area	SA2 Area
204	32%	1.9%	1100922	101021009
205	0%	10.0%	1101011	101021010
206	100%	15.8%	1101012	101021010
207	73%	3.0%	1101011	101021010
208	100%	1.0%	1101010	101021010
209	27%	13.9%	1101011	101021010
210	56%	0.8%	1101008	101021010
211	44%	0.8%	1101008	101021010
212	0%	5.9%	1101008	101021010
213	33%	2.0%	1101006	101021010
214	0%	0.3%	1101007	101021010
215	0%	2.9%	1101007	101021010
216	100%	2.7%	1101007	101021010
217	13%	4.5%	1101006	101021010
218	54%	1.8%	1101006	101021010
219	59%	1.0%	1101015	101021010
220	41%	2.7%	1101015	101021010
221	73%	0.0%	1101005	101021010
222	27%	0.0%	1101005	101021010
223	70%	0.0%	1101003	101021010
224	0%	1.4%	1101003	101021010
225	30%	0.5%	1101003	101021010
226	100%	0.9%	1101002	101021010
227	100%	0.0%	1101004	101021010
228	0%	1.1%	1101009	101021010
229	90%	0.6%	1101009	101021010
230	10%	0.2%	1101009	101021010
231	100%	3.6%	1101001	101021010
232	0%	3.4%	1101011	101021010
233	0%	3.4%	1101011	101021010
234	0%	0.9%	1101011	101021010
235	0%	4.9%	1101011	101021010
236	0%	2.4%	1101011	101021010
237	0%	5.3%	1101011	101021010
238	100%	0.0%	1101014	101021010
239	100%	0.3%	1101119	101021011
240	67%	0.0%	1101128	101021011
241	33%	0.0%	1101128	101021011
242	100%	30.6%	1101122	101021011
243	0%	0.0%	1101121	101021011
244	0%	0.0%	1101121	101021011
245	50%	65.4%	1101121	101021011
246	0%	3.7%	1101121	101021011
247	71%	0.0%	1101120	101021011
248	29%	0.0%	1101120	101021011
249	0%	0.0%	1101121	101021011
250	0%	0.0%	1101121	101021011

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
251	11	801051053	City
252	12	801051053	City
253	13	801051053	City
254	14	801051053	City
255	15	801051053	City
256	16	801051053	City
257	17	801051053	City
258	18	801051053	City
259	19	801051053	City
260	20	801051053	City
261	21	801051053	City
262	22	801051053	City
263	23	801051053	City
264	24	801051053	City
265	25	801051053	City
266	26	801051053	City
267	27	801051053	City
268	28	801051053	City
269	29	801051053	City
270	30	801051053	City
271	31	801051053	City
272	32	801051053	City
273	33	801051053	City
274	35	801051053	City
275	36	801051053	City
276	37	801051053	City
277	38	801051053	City
278	39	801051053	City
279	40	801051053	City
280	41	801051053	City
281	42	801051053	City
282	43	801051053	City
283	44	801051053	City
284	45	801051053	City
285	46	801051053	City
286	47	801051053	City
287	48	801051053	City
288	49	801051053	City
289	50	801051059	Reid
290	51	801051059	Reid
291	52	801051059	Reid
292	53	801051059	Reid
293	54	801051059	Reid
294	55	801051059	Reid
295	56	801051059	Reid
296	57	801051049	Acton
297	58	801051049	Acton
298	59	801051049	Acton - ANU
299	60	801051049	Acton
300	61	801021028	Acton - CSIRO
301	62	801051060	Turner
302	63	801051060	Turner
303	64	801051060	Turner

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
304	65	801051060	Turner
305	66	801051060	Turner
306	67	801051060	Turner
307	68	801051060	Turner
308	69	801051060	Turner
309	70	801051060	Turner
310	71	801051060	Turner
311	72	801051060	Turner
312	73	801051060	Turner
313	74	801051060	Turner
314	75	801051060	Turner
315	76	801051060	Turner
316	77	801051060	Turner
317	78	801051060	Turner
318	79	801051051	Braddon
319	80	801051051	Braddon
320	81	801051051	Braddon
321	82	801051051	Braddon
322	83	801051051	Braddon
323	84	801051051	Braddon
324	85	801051051	Braddon
325	86	801051051	Braddon
326	87	801051051	Braddon
327	88	801051051	Braddon
328	89	801051051	Braddon
329	90	801051051	Braddon
330	91	801051051	Braddon
331	92	801051051	Braddon
332	93	801051052	Ainslie
333	94	801051052	Campbell (War Memorial)
334	95	801051052	Campbell
335	96	801051052	Campbell
336	97	801051052	Campbell
337	98	801051052	Campbell
338	99	801051052	Campbell
339	100	801051052	Campbell
340	101	801051052	Campbell
341	102	801051052	Campbell
342	103	801051059	Campbell
343	104	801051059	Campbell
344	105	801051059	Parkes
345	106	801051059	Campbell
346	108	801051059	Campbell
347	109	801051059	Reid
348	110	801051059	Reid
349	111	801051059	Reid
350	112	801051059	City
351	113	801051052	Russell
352	114	801051052	Campbell
353	115	801051052	Campbell
354	116	801051052	Russell
355	117	801051052	Campbell

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
356	118	801051052	Russell
357	119	801051052	Russell
358	121	801051052	Russell
359	122	801051052	Russell
360	123	801051052	Russell
361	124	801051052	Russell
362	125	801051052	Russell
363	126	801051052	Russell
364	127	801051052	Russell
365	128	801051052	Russell
366	129	801051052	Russell
367	130	801051052	Russell
368	131	801051052	Russell
369	132	801051052	Russell
370	133	801051052	Russell
371	134	801051052	Russell
372	135	801051052	Russell
373	136	801051052	Russell
374	137	801051052	Russell
375	138	801051052	Campbell - ADFA
376	139	801051052	Campbell - Duntroon
377	140	801051058	O'Connor
378	141	801051058	O'Connor
379	142	801051058	O'Connor
380	143	801051058	O'Connor
381	144	801051058	O'Connor
382	145	801051058	O'Connor
383	146	801051058	O'Connor
384	147	801051058	O'Connor
385	148	801051058	O'Connor
386	149	801051058	O'Connor
387	150	801051058	O'Connor
388	151	801051058	O'Connor
389	152	801051058	Lyneham
390	153	801051058	O'Connor
391	154	801051058	O'Connor
392	155	801051058	O'Connor
393	156	801051058	O'Connor
394	157	NOT EXIST	O'Connor
395	158	801051058	O'Connor
396	159	801051058	Lyneham
397	160	801051058	O'Connor
398	161	801051057	Lyneham
399	162	801051057	Lyneham
400	163	801051057	Lyneham
401	164	801051057	Lyneham
402	165	801051057	Lyneham
403	166	801051057	Lyneham
404	167	801051057	Lyneham
405	168	801051057	Lyneham
406	169	801051057	Lyneham
407	170	801051057	Lyneham
408	171	801051057	Lyneham

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
409	172	801051057	Lyneham
410	173	801051057	Lyneham
411	174	801051057	Lyneham
412	175	801051057	Lyneham
413	176	801051057	Lyneham
414	177	801051057	Lyneham
415	178	801051057	Lyneham North
416	179	801051057	Lyneham
417	180	801051057	Mitchell
418	181	801051057	Mitchell
419	182	801051054	Dickson
420	183	801051054	Dickson
421	184	801051054	Dickson
422	185	801051054	Dickson
423	186	801051054	Dickson
424	187	801051054	Dickson
425	188	801051054	Dickson
426	189	801051054	Dickson
427	190	801051054	Dickson
428	191	801051054	Dickson
429	192	801051055	Downer
430	193	801051055	Downer
431	194	801051055	Downer
432	195	801051050	Ainslie
433	196	801051050	Ainslie
434	197	801051050	Ainslie
435	198	801051050	Ainslie
436	199	801051050	Ainslie
437	200	801051050	Ainslie
438	201	801051050	Ainslie
439	202	801051050	Ainslie
440	203	801051050	Ainslie
441	204	801051056	Hackett
442	205	801051056	Hackett
443	206	801051056	Hackett
444	207	801051061	Watson
445	208	801051061	Watson
446	209	801051061	Watson
447	210	801051061	Watson
448	211	801051061	Watson
449	212	801051061	Watson
450	213	801051061	Watson
451	214	801051061	Watson
452	215	801051061	Watson
453	216	801051061	Watson
454	226	801061068	Parkes
455	227	801061068	Parkes
456	228	801061068	Parkes
457	229	801061068	Parkes
458	230	801061068	Parkes
459	231	801061068	Parkes - Parliament House
460	232	801061065	Barton

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
461	233	801061065	Barton
462	234	801061065	Barton
463	235	801061065	Barton
464	236	801061063	Forrest
465	237	801061063	Forrest
466	238	801061062	Deakin
467	239	801061062	Deakin
468	240	801061062	Deakin
469	241	801061062	Deakin
470	243	801061070	Yarralumla
471	244	801061070	Yarralumla
472	245	801061070	Yarralumla
473	246	801061070	Yarralumla
474	247	801061065	Kingston
475	248	801061065	Kingston
476	249	801061065	Kingston
477	250	801061064	Griffith
478	251	801061064	Griffith
479	252	801061064	Griffith - Manuka
480	253	801061064	Griffith
481	254	801061064	Griffith
482	255	801061064	Narrabundah
483	256	801061069	Red-Hill
484	257	801061069	Red-Hill
485	258	801031030	Fyshwick
486	259	801061067	Narrabundah
487	260	801061067	Narrabundah
488	261	801061067	Narrabundah
489	262	801061067	Narrabundah
490	263	801061067	Narrabundah
491	264	801061067	Narrabundah
492	265	801061067	Narrabundah
493	271	801091109	Phillip
494	272	801091109	Phillip
495	273	801091109	Phillip - Woden TC
496	274	801091109	Phillip - Woden TC
497	275	801091109	Phillip - Woden TC
498	276	801091109	Phillip
499	277	801091109	Phillip
500	278	801091109	Phillip
501	279	801091109	Phillip
502	280	801091109	Phillip
503	281	801091109	Phillip
504	282	801091109	Phillip
505	283	801091103	Hughes
506	284	801091103	Hughes
507	285	801091103	Hughes
508	286	801091103	Hughes
509	287	801091103	Hughes
510	288	801091103	Hughes
511	289	801091102	Garran
512	290	801091102	Garran - Woden Hospital

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
513	291	801091107	O'Malley
514	292	801091107	O'Malley
515	293	801091106	Mawson
516	294	801091106	Mawson
517	295	801091106	Mawson
518	296	801091108	Pearce
519	297	801091108	Pearce
520	298	801091108	Pearce
521	299	801091108	Pearce
522	300	801091099	Chifley
523	301	801091099	Chifley
524	302	801091099	Chifley
525	303	801091105	Lyons
526	304	801091105	Lyons
527	305	801091105	Lyons
528	306	801091100	Curtin
529	307	801091100	Curtin
530	308	801091104	Isaacs
531	309	801091104	Isaacs
532	310	801091104	Isaacs
533	311	801091104	Isaacs
534	312	801091106	Mawson
535	313	801091106	Mawson
536	314	801091110	Torrens
537	315	801091101	Farrer
538	316	801091101	Farrer
539	317	801091101	Farrer
540	318	801091101	Farrer
541	319	801091101	Farrer
542	320	801081093	Fisher
543	321	801081097	Waramanga
544	322	801081096	Stirling
545	323	801081098	Weston
546	324	801081098	Weston
547	325	801081098	Weston
548	326	801081098	Weston
549	327	801081091	Chapman
550	328	801081095	Rivett
551	329	801081094	Holder
552	330	801081094	Holder
553	331	801081094	Holder
554	332	801081094	Holder
555	333	801081094	Holder
556	334	NOT EXIST	Duffy
557	335	801051058	Weston
558	336	801081092	Duffy
559	337	801081092	Duffy
560	338	801081092	Duffy
561	339	801081092	Duffy
562	340	801081092	Duffy
563	341	801081092	Duffy
564	342	NOT EXIST	Duffy
565	351	801011002	Belconnen

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
566	352	801011002	Belconnen
567	353	801011002	Belconnen
568	354	801011002	Belconnen
569	355	801011002	Belconnen
570	356	801011002	Belconnen
571	357	801011002	Belconnen
572	358	801011002	Belconnen
573	359	801011002	Belconnen
574	360	801011002	Belconnen
575	361	801011002	Belconnen
576	364	801011002	Belconnen
577	365	801011023	Page
578	366	801011023	Page
579	367	801011023	Page
580	368	801011023	Page
581	369	801011023	Page
582	370	801011008	Florey
583	371	801011008	Florey
584	372	801011008	Florey
585	373	801011008	Florey
586	374	801011007	Evatt
587	375	801011007	Evatt
588	376	801011007	Evatt
589	377	801011007	Evatt
590	378	801011021	McKellar
591	379	801011021	McKellar
592	380	801011018	Lawson
593	381	801011003	Bruce
594	382	801011003	Bruce
595	383	801011003	Bruce
596	384	801011003	Bruce
597	385	801011003	Bruce
598	386	801011003	Bruce
599	387	801011003	Bruce
600	388	801011003	Bruce
601	389	801011001	Aranda
602	390	801011020	Macquarie - Jamison
603	391	801011020	Macquarie
604	392	801011005	Cook
605	393	801011005	Cook
606	394	801011005	Cook
607	395	801011026	Weetangerra
608	396	801011026	Weetangerra
609	397	801011013	Hawker
610	398	801011013	Hawker
611	399	801011013	Hawker
612	400	801011013	Hawker
613	401	801011013	Hawker
614	402	801011024	Scullin
615	403	801011024	Scullin
616	404	801011024	Scullin
617	405	801011024	Scullin
618	406	801011024	Scullin

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
619	407	801011014	Higgins
620	408	801011014	Higgins
621	409	801011014	Higgins
622	410	801011014	Higgins
623	411	801011014	Higgins
624	412	801011014	Higgins
625	413	801011017	Latham
626	414	801011017	Latham
627	415	801011017	Latham
628	416	801011017	Latham
629	417	801011017	Latham
630	418	801011017	Latham
631	419	801011022	Melba
632	420	801011022	Melba
633	421	801011022	Melba
634	422	801011025	Spence
635	423	801011009	Flynn
636	424	801011009	Flynn
637	425	801011009	Flynn
638	426	801011010	Fraser
639	427	801011010	Fraser
640	428	801011010	Fraser
641	429	801011010	Fraser
642	430	801011004	Charnwood
643	431	801011004	Charnwood
644	432	801011004	Charnwood
645	433	801011004	Charnwood
646	434	801011004	Charnwood
647	435	801011004	Charnwood
648	436	801011004	Charnwood
649	437	801011019	Macgregor
650	438	801011019	Macgregor
651	439	801011019	Macgregor
652	440	801011019	Macgregor
653	441	801011015	Holt
654	442	801011015	Holt - Kippax
655	443	801011015	Holt
656	444	801011015	Holt
657	445	801011015	Holt
658	446	801011015	Holt
659	447	801011015	Holt
660	448	801011019	Macgregor
661	449	801011019	Macgregor
662	450	801011019	Macgregor
663	451	801011019	Macgregor
664	452	801011019	Macgregor
665	453	801011006	Dunlop
666	454	801011006	Dunlop
667	455	801011006	Dunlop
668	456	801011006	Dunlop
669	457	801011006	Dunlop
670	458	801011006	Dunlop
671	459	801011006	Dunlop

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
672	462	801011006	Dunlop
673	464	801011011	Giralang
674	465	801011011	Giralang
675	466	801011016	Kaleen
676	467	801011016	Kaleen
677	468	801011016	Kaleen
678	469	801011016	Kaleen
679	470	801011016	Kaleen
680	471	801011016	Kaleen
681	472	801011016	Kaleen
682	473	801011016	Kaleen
683	474	801011016	Kaleen
684	475	801011016	Kaleen
685	491	801041040	Gungahlin
686	492	801041040	Gungahlin
687	493	801041040	Gungahlin
688	494	801041040	Gungahlin
689	495	801041040	Gungahlin
690	496	801041041	Throsby
691	497	801041040	Gungahlin
692	498	801041040	Gungahlin
693	500	801041040	Gungahlin
694	501	801041040	Gungahlin
695	502	801041044	Gungahlin
696	503	801041044	Gungahlin
697	504	801041039	Gungahlin
698	505	801041040	Gungahlin
699	506	801041040	Gungahlin
700	507	801041040	Gungahlin
701	508	801041048	Palmerston
702	509	801041048	Palmerston
703	510	801041048	Palmerston
704	511	NOT EXIST	Palmerston
705	512	801041048	Palmerston
706	513	801041048	Palmerston
707	514	801041048	Palmerston
708	515	801041048	Palmerston
709	516	801041045	Crace
710	517	801041037	Crace
711	518	801041041	Throsby
712	519	801041041	Throsby
713	520	801041041	Throsby
714	521	801041041	Throsby
715	522	801041041	Throsby
716	523	801041041	Throsby
717	525	801041044	Harrison
718	526	801041044	Harrison
719	527	801041044	Harrison (South)
720	528	801041044	Harrison
721	529	801041044	Harrison
722	530	801041044	Harrison
723	531	801041039	Franklin (NW)
724	532	801041039	Franklin (south)

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
725	533	801041039	Franklin (West)
726	534	801041039	Franklin (south)
727	535	801041039	Franklin
728	536	801041040	Gungahlin
729	537	801041040	Franklin
730	538	801041041	Throsby
731	539	801041041	Throsby
732	540	801041041	Kenny
733	541	801041041	Kenny
734	542	801041041	Kenny
735	543	801041041	Kenny
736	544	801041041	Kenny
737	545	801041041	Kenny
738	546	801041041	Kenny
739	547	801041045	Mitchell
740	548	801041045	Mitchell
741	549	801041045	Mitchell
742	550	801041034	Amaroo
743	551	801041034	Amaroo
744	552	801041034	Amaroo
745	553	801041034	Amaroo
746	554	801041046	Ngunnawal
747	555	801041046	Ngunnawal
748	556	801041046	Ngunnawal
749	557	801041046	Ngunnawal
750	558	801041046	Ngunnawal
751	559	801041046	Ngunnawal
752	560	801041046	Ngunnawal
753	561	801041046	Ngunnawal
754	562	801041046	Ngunnawal
755	563	801041046	Ngunnawal
756	564	801041046	Ngunnawal
757	565	801041046	Ngunnawal
758	566	801041046	Ngunnawal
759	567	801041046	Ngunnawal
760	568	801041046	Ngunnawal
761	569	801041046	Ngunnawal
762	570	801041046	Ngunnawal
763	571	801041046	Ngunnawal
764	572	801041047	Nicholls
765	573	801041047	Nicholls
766	574	801041047	Nicholls
767	575	801041047	Nicholls - Harcourt Hill
768	576	801041047	Nicholls - Harcourt Hill
769	577	801041047	Nicholls - Gold Creek
770	578	801041047	Nicholls - Harcourt Hill
771	579	801041047	Nicholls - Harcourt Hill
772	580	801041047	Nicholls - Harcourt Hill
773	581	801041047	Nicholls - Harcourt Hill
774	582	801041047	Nicholls - Harcourt Hill
775	583	801041047	Nicholls
776	584	801041047	Nicholls - Harcourt Hill
777	585	801041047	Nicholls - Harcourt Hill

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
778	586	801041047	Nicholls - Harcourt Hill
779	587	801041047	Nicholls - Harcourt Hill
780	588	801041047	Nicholls
781	589	801041036	Casey
782	590	801041036	Casey
783	591	801041042	Kinlyside
784	592	801041042	Kinlyside
785	593	801041042	Kinlyside
786	594	801041036	Casey
787	595	801041036	Casey
788	600	801041036	Taylor
789	601	801041043	Hall
790	602	801041042	Taylor
791	603	801051053	Taylor
792	604	801051053	Taylor
793	605	801051053	Taylor
794	606	801051053	Moncrieff
795	607	801051053	Moncrieff
796	608	801051053	Moncrieff
797	609	801051053	Moncrieff
798	610	801051053	Bonner
799	611	801051053	Jacka
800	612	801051053	Jacka
801	613	801051053	Jacka
802	614	801051053	Bonner
803	615	801051053	Bonner
804	616	801051053	Bonner
805	617	801051053	Forde
806	618	801051053	Forde
807	619	801051053	Forde
808	631	801051053	Pialligo
809	632	801051053	Campbell
810	633	801051053	Pialligo - Canberra International Airport
811	634	801051053	Pialligo - Canberra International Airport (east)
812	635	801051053	Fyshwick
813	636	801051053	Fyshwick
814	637	801051053	Fyshwick
815	638	801051053	Fyshwick
816	639	801051053	Fyshwick
817	640	801051053	Fyshwick
818	642	801051053	Symonston (Harman)
819	643	801051053	Symonston
820	644	801051053	Symonston
821	645	801051053	Symonston
822	646	801051053	Symonston
823	647	801051053	Symonston
824	648	801051053	Hume
825	649	801051053	Symonston
826	650	801051053	Symonston
827	651	801051053	Symonston

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
828	652	801051053	Symonston
829	653	801051059	Hume
830	654	801051059	Hume
831	656	801051059	Hume
832	657	801051059	Hume
833	658	801051059	Symonston
834	659	801051059	Symonston
835	660	801051059	Symonston
836	661	801051049	Symonston
837	662	801051049	Symonston
838	663	801051049	Symonston
839	664	801051049	Hume
840	701	801021028	Greenway (Tuggeranong TC)
841	702	801051060	Greenway (Tuggeranong TC)
842	703	801051060	Greenway (Tuggeranong TC)
843	704	801051060	Greenway (Tuggeranong TC)
844	705	801051060	Greenway (Tuggeranong TC)
845	706	801051060	Greenway (Tuggeranong TC)
846	707	801051060	Greenway (Tuggeranong TC)
847	708	801051060	Greenway (Tuggeranong TC)
848	709	801051060	Greenway
849	710	801051060	Greenway
850	711	801051060	Oxley
851	712	801051060	Monash
852	713	801051060	Monash
853	714	801051060	Monash
854	715	801051060	Isabella Plains
855	716	801051060	Isabella Plains
856	717	801051060	Isabella Plains
857	718	801051060	Isabella Plains
858	719	801051051	Bonython
859	720	801051051	Bonython
860	721	801051051	Bonython
861	722	801051051	Bonython
862	723	801051051	Kambah
863	724	801051051	Kambah
864	725	801051051	Kambah
865	726	801051051	Kambah
866	727	801051051	Kambah
867	728	801051051	Kambah
868	729	801051051	Kambah
869	730	801051051	Kambah
870	731	801051051	Kambah
871	732	801051051	Kambah
872	733	801051052	Kambah
873	734	801051052	Kambah
874	735	801051052	Kambah

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
875	736	801051052	Kambah
876	737	801051052	Kambah
877	738	801051052	Kambah
878	739	801051052	Kambah
879	740	801051052	Kambah
880	741	801051052	Wanniassa
881	742	801051052	Wanniassa
882	743	801051059	Wanniassa
883	744	801051059	Wanniassa
884	745	801051059	Wanniassa
885	746	801051059	Wanniassa - Erindale
886	747	801051059	Fadden
887	748	801051059	Fadden
888	749	801051059	Gowrie
889	750	801051059	Gowrie
890	751	801051059	Gowrie
891	752	801051052	Gowrie
892	753	801051052	Richardson
893	754	801051052	Richardson
894	755	801051052	Richardson
895	756	801051052	Calwell
896	757	801051052	Calwell
897	758	801051052	Gordon
898	759	801051052	Gordon
899	760	801051052	Gordon
900	761	801051052	Gordon
901	762	801051052	Gordon
902	763	801051052	Gordon
903	764	801051052	Macarthur
904	765	801051052	Gilmore
905	766	801051052	Chisholm
906	767	801051052	Chisholm
907	768	801051052	Chisholm
908	769	801051052	Chisholm
909	770	801051052	Theodore
910	771	801051052	Conder
911	772	801051052	Conder
912	773	801051052	Conder
913	774	801051052	Conder
914	775	801051052	Conder
915	776	801051052	Conder
916	777	801051052	Conder
917	778	801051058	Conder
918	779	801051058	Conder
919	780	801051058	Conder
920	781	801051058	Conder
921	782	801051058	Conder
922	783	801051058	Conder
923	784	801051058	Conder
924	785	801051058	Conder
925	786	801051058	Banks
926	787	801051058	Banks
927	788	801051058	Banks

Tracks Zone	Emme/ 2 Zone	SA2 Area	Zone Description
928	789	801051058	Banks
929	790	801051058	Greenway (Tuggeranong TC)

Appendix Two – Land Use Files

\ZONEDTV5.20
 Queanbeyan 2011 TRANSPORTATION MODEL
 QC11EX.2ND
 1200
 Employees/HH
 Cars/HH

1. Households
2. Primary School Roll
3. Secondary School Roll
4. Tertiary Roll
5. Retail Jobs
6. Finance
7. Community (Edu, Health & Arts) Jobs
8. Manufacturing (Min, Man & Utilities) Jobs
9. Other Jobs
10. Total Jobs
11. HQJOC
12. Queanbeyan Households
13. spare
14. spare
15. spare
16. spare
17. AMPEAK Externals inbound
18. AMPEAK Externals outbound
19. OFFPEAK Externals inbound
20. OFFPEAK Externals outbound
21. PMPEAK Externals inbound
22. PMPEAK Externals outbound
23. AMPEAK Externals thrus
24. AMPEAK Externals thrus
25. OFFPEAK Externals thrus
26. OFFPEAK Externals thrus
27. PMPEAK Externals thrus
28. PMPEAK Externals

	HH	PRI	SEC	TER	RET	FIN	COM	MAN	OTH	TOT	HQJ	QHH	
1	1.164	1.169	0	0	0	0	21	0	13	34	0	0	
2	1.164	1.169	0	0	0	0	21	0	13	34	0	0	
3	1.164	1.169	0	0	0	0	55	0	35	90	0	0	
4	1.164	1.169	0	0	0	0	21	0	19	40	0	0	
5	1.164	1.169	0	0	0	0	21	0	13	34	0	0	
6	1.478	1.563	0	0	0	3	0	3	5	11	0	0	
7	1.478	1.563	0	0	0	3	0	3	5	11	0	0	
8	1.478	1.563	0	0	0	22	2	14	1	22	61	0	0
9	1.478	1.563	0	0	0	33	3	21	1	31	90	0	0
10	1.478	1.563	0	0	0	33	3	21	1	32	91	0	0
11	1.478	1.563	0	0	0	22	2	14	1	22	61	0	0
12	1.164	1.169	0	0	0	11	1	7	0	12	32	0	0
13	1.164	1.169	0	0	0	28	3	18	1	27	76	0	0
14	1.164	1.169	0	0	0	17	2	11	0	16	45	0	0
15	1.164	1.169	0	0	0	22	2	14	1	22	61	0	0
16	1.164	1.169	0	0	0	17	2	11	0	16	45	0	0
17	1.164	1.169	0	0	0	17	2	11	0	16	45	0	0
18	1.164	1.169	0	0	0	6	1	8	0	9	23	0	0
19	1.164	1.169	0	0	0	5	1	6	0	8	20	0	0
20	1.164	1.169	0	0	0	5	1	6	0	17	28	0	0
21	1.164	1.169	0	0	0	6	1	7	0	9	22	0	0
22	1.164	1.169	0	0	0	5	1	6	0	12	24	0	0
23	1.164	1.169	0	0	0	5	1	6	0	26	38	0	0
24	1.164	1.169	0	0	0	5	1	6	0	17	28	0	0
25	1.164	1.169	0	0	0	19	2	21	0	26	69	0	0
26	1.164	1.169	0	0	0	10	1	10	0	13	35	0	0
27	1.164	1.169	0	0	0	10	1	10	0	12	34	0	0
28	1.164	1.169	0	0	0	19	2	21	0	25	68	0	0
29	1.164	1.169	0	0	0	19	2	21	0	24	67	0	0
30	1.164	1.169	0	0	0	19	2	21	0	24	67	0	0
31	1.478	1.563	0	0	0	10	1	10	0	14	36	0	0
32	1.478	1.563	0	0	0	14	1	14	0	18	47	0	0
33	1.478	1.563	0	0	0	14	1	14	0	18	47	0	0
34	1.478	1.563	0	0	0	10	1	10	0	14	36	0	0
35	1.478	1.563	0	0	0	10	1	10	0	42	64	0	0
36	1.478	1.563	0	0	0	10	1	10	0	14	36	0	0
37	1.478	1.563	0	0	0	10	1	6	25	31	73	0	0
38	1.285	1.673	0	0	0	3	0	2	9	11	24	0	0
39	1.285	1.673	0	79	0	3	0	2	9	16	29	0	0
40	0.992	0.949	0	0	0	11	1	18	0	18	48	0	0
41	0.992	0.949	0	0	0	14	1	22	0	23	61	0	0
42	0.992	0.949	0	0	0	11	1	18	0	18	48	0	0
43	0.992	0.949	0	0	0	11	1	18	0	18	48	0	0
44	0.992	0.949	0	0	0	11	1	18	0	18	48	0	0
45	0.992	0.949	0	0	0	11	1	18	0	47	77	0	0
46	0.992	0.949	0	0	0	7	1	11	0	12	32	0	0
47	0.992	0.949	0	0	0	7	1	11	0	12	32	0	0
48	0.992	0.949	0	0	0	7	1	11	0	12	31	0	0
49	0.992	0.949	0	0	0	7	1	11	0	12	32	0	0
50	0.992	0.949	0	0	0	7	1	11	0	12	31	0	0
51	1.478	1.563	0	0	0	0	0	0	0	0	0	0	0
52	1.164	1.169	0	0	0	0	0	0	0	0	0	0	0
53	1.164	1.169	141	0	0	8	1	10	0	69	88	0	141

141	1.449	1.856	105	370	0	0	0	7	1	4	20	122	152	0	105
142	1.407	1.984	123	0	0	0	0	0	0	0	0	0	0	0	123
143	1.202	1.729	94	0	0	0	0	0	0	0	0	0	0	0	94
144	1.478	1.563	73	0	0	0	0	0	0	0	0	0	0	0	73
145	1.478	1.563	75	0	0	0	0	0	0	0	0	0	0	0	75
146	0.924	1.098	158	0	0	0	6	1	3	24	28	62	0	0	158
147	1.358	1.306	165	0	0	0	3	0	1	10	12	27	0	0	165
148	1.356	1.437	180	0	0	0	0	0	0	0	0	0	0	0	180
149	1.151	1.668	166	0	0	0	10	1	6	29	35	81	0	0	166
150	1.172	1.261	221	0	0	0	3	0	2	4	30	39	0	0	221
151	1.251	1.160	259	0	0	0	8	1	5	21	83	118	0	0	259
152	1.109	1.325	257	0	0	0	8	1	5	24	29	67	0	0	257
153	1.252	1.328	325	0	0	0	8	1	5	35	95	144	0	0	325
154	1.164	1.169	85	0	0	0	6	1	7	0	66	79	0	0	85
155	4.800	3.600	0	0	0	0	13	0	5	95	145	258	0	0	0
156	1.550	1.675	40	0	0	0	20	0	8	153	229	410	0	0	40
157	4.800	3.600	4	0	0	0	3	0	1	9	65	77	0	0	4
158	1.196	1.396	168	0	0	0	1	0	0	4	21	26	0	0	168
159	4.800	3.600	1	0	0	0	18	0	7	133	201	359	0	0	1
160	1.245	1.203	113	0	0	0	0	0	0	0	20	20	0	0	113
161	1.245	1.203	91	0	0	0	0	0	0	0	20	20	0	0	91
162	1.245	1.203	0	0	0	0	24	0	3	37	104	169	0	0	0
163	1.096	1.070	82	0	0	0	2	0	1	9	41	53	0	0	82
164	1.134	1.331	0	0	0	0	0	0	0	0	6	7	0	0	0
165	1.134	1.331	0	0	0	331	10	0	4	12	50	75	0	0	0
166	1.134	1.331	142	0	0	0	10	0	4	12	45	71	0	0	142
167	1.096	1.070	34	555	0	0	6	0	2	7	93	108	0	0	34
168	1.096	1.070	135	0	0	0	4	0	2	5	35	46	0	0	135
169	1.168	1.103	182	0	0	0	1	0	0	1	22	25	0	0	182
170	1.168	1.103	128	0	0	0	10	0	4	12	45	71	0	0	128
171	1.500	1.639	209	0	0	0	0	0	0	0	0	0	0	0	209
172	1.500	1.639	79	0	0	0	0	0	0	0	0	0	0	0	79
173	1.980	2.426	71	0	0	0	0	0	0	0	0	0	0	0	71
174	1.980	2.426	0	0	0	0	7	0	3	8	18	36	0	0	0
175	1.980	2.426	30	0	0	0	2	0	1	2	7	12	0	0	30
176	1.947	2.776	113	0	0	0	8	0	0	5	12	24	0	0	113
177	1.625	1.984	104	0	0	0	0	0	0	0	0	0	0	0	104
178	1.542	2.055	0	0	0	0	3	0	1	9	15	27	0	0	0
179	1.542	2.055	128	0	0	0	0	0	0	0	16	16	0	0	128
180	1.542	2.055	14	0	0	0	0	0	0	0	6	6	0	0	14
181	0.966	1.085	59	166	0	0	1	0	2	4	75	83	0	0	59
182	4.800	3.600	0	0	0	0	9	0	2	27	51	89	0	0	0
183	4.800	3.600	0	0	0	0	9	0	2	27	51	89	0	0	0
184	4.800	3.600	0	0	0	0	2	0	0	5	30	37	0	0	0
185	4.800	3.600	0	0	0	0	13	0	0	42	72	127	0	0	0
186	4.800	3.600	0	0	0	0	6	0	1	18	36	61	0	0	0
187	4.800	3.600	0	0	0	0	14	0	0	46	78	138	0	0	0
188	1.425	2.923	56	0	0	0	0	0	0	0	0	0	0	0	56
189	2.205	2.778	78	0	0	0	0	0	0	0	0	0	0	0	78
190	2.123	2.626	49	0	0	0	0	0	0	0	0	0	0	0	49
191	2.123	2.626	24	0	0	0	0	0	0	0	0	0	0	0	24
192	1.925	2.704	93	0	0	0	5	6	3	1	27	42	0	0	93
193	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
194	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
195	1.978	2.808	46	0	0	0	4	22	2	9	51	89	0	0	46
196	1.978	2.808	0	0	0	0	0	1	0	0	3	5	0	0	0
197	2.099	2.872	108	0	0	0	0	0	0	0	0	0	0	0	108
198	2.099	2.872	44	0	0	0	0	0	0	0	0	0	0	0	44
199	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
200	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
201	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
202	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
203	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
204	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
205	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
206	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
207	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
208	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
209	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
210	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
211	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
212	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
213	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
214	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
215	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
216	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
217	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
218	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
219	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
220	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
221	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
222	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
223	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
224	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
225	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
226	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0
227	1.978	2.808	0	0	0	0	0	0	0	0	0	0	0	0	0

315	1.367	1.177	49	536	0	0	0	3	8	0	82	93	0	0	
316	1.367	1.177	122	0	0	0	0	3	9	0	88	100	0	0	
317	1.360	1.058	163	0	0	0	0	6	9	0	153	168	0	0	
318	1.360	1.058	65	0	0	0	1	11	17	0	175	204	0	0	
319	1.360	1.058	390	0	0	0	0	2	2	0	140	143	0	0	
320	1.360	1.058	130	0	0	0	0	7	11	0	158	176	0	0	
321	1.360	1.058	228	0	923	0	0	9	12	0	161	181	0	0	
322	1.360	1.058	0	0	0	0	0	87	7	11	751	962	0	0	
323	1.360	1.058	0	0	0	0	0	0	25	38	0	218	282	0	0
324	1.360	1.058	65	0	0	0	0	0	1	0	136	137	0	0	
325	1.360	1.058	260	0	0	0	0	1	2	0	138	141	0	0	
326	1.360	1.058	390	524	0	0	0	3	5	0	145	152	0	0	
327	1.360	1.058	195	0	0	0	0	1	2	0	138	141	0	0	
328	1.360	1.058	65	0	0	0	0	0	1	0	136	137	0	0	
329	1.360	1.058	0	0	0	0	53	20	30	0	352	456	0	0	
330	1.360	1.058	33	0	0	0	43	20	31	0	323	417	0	0	
331	2.351	1.592	50	0	0	0	27	0	0	0	294	320	0	0	
332	2.351	1.592	113	0	0	0	0	0	1	0	8	9	0	0	
333	2.351	1.592	0	0	554	0	0	0	78	0	855	933	0	0	
334	2.351	1.592	126	0	0	0	0	0	3	0	167	170	0	0	
335	2.351	1.592	113	100	0	0	0	0	2	0	151	153	0	0	
336	2.351	1.592	101	0	0	0	0	0	1	0	143	144	0	0	
337	2.351	1.592	176	0	0	0	6	1	5	0	262	275	0	0	
338	2.351	1.592	214	0	0	0	0	0	1	0	147	148	0	0	
339	2.351	1.592	88	0	0	0	0	0	0	0	135	135	0	0	
340	2.351	1.592	0	0	0	0	0	0	0	0	135	135	0	0	
341	2.351	1.592	0	0	0	0	0	1	8	1	231	241	0	0	
342	1.075	1.066	0	0	0	0	0	0	0	0	33	33	0	0	
343	1.075	1.066	0	0	0	0	0	0	0	0	33	33	0	0	
344	1.075	1.066	0	0	0	0	0	0	1	0	39	39	0	0	
345	1.075	1.066	0	0	0	0	0	0	0	0	33	33	0	0	
346	1.075	1.066	0	0	0	0	0	0	6	0	90	96	0	0	
347	1.075	1.066	0	0	0	0	0	0	7	0	96	103	0	0	
348	1.075	1.066	0	0	0	0	0	0	0	0	33	33	0	0	
349	1.075	1.066	0	0	0	3515	0	1	22	0	247	271	0	0	
350	1.075	1.066	0	0	0	0	3	0	1	0	60	63	0	0	
351	2.351	1.592	0	0	0	0	0	1	10	1	251	263	0	0	
352	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
353	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
354	2.351	1.592	0	0	0	0	0	1	10	1	251	263	0	0	
355	2.351	1.592	0	0	0	0	0	2	13	1	291	307	0	0	
356	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
357	2.351	1.592	0	0	0	0	0	1	7	0	211	219	0	0	
358	2.351	1.592	0	0	0	0	0	0	3	0	171	175	0	0	
359	2.351	1.592	0	0	0	0	0	0	3	0	171	175	0	0	
360	2.351	1.592	0	0	0	0	0	2	18	1	351	373	0	0	
361	2.351	1.592	0	0	0	0	0	1	9	1	239	249	0	0	
362	2.351	1.592	0	0	0	0	0	2	16	1	331	351	0	0	
363	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
364	2.351	1.592	0	0	0	0	0	3	23	1	411	439	0	0	
365	2.351	1.592	0	0	0	0	0	3	20	1	371	395	0	0	
366	2.351	1.592	0	0	0	0	0	1	10	1	251	263	0	0	
367	2.351	1.592	0	0	0	0	0	1	7	0	211	219	0	0	
368	2.351	1.592	0	0	0	0	0	1	10	1	251	263	0	0	
369	2.351	1.592	0	0	0	0	0	2	16	1	333	353	0	0	
370	2.351	1.592	0	0	0	0	0	1	10	1	251	263	0	0	
371	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
372	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
373	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
374	2.351	1.592	0	0	0	0	0	0	0	0	131	131	0	0	
375	2.351	1.592	179	0	0	307	0	0	104	0	1140	1244	0	0	
376	2.351	1.592	151	0	0	0	0	1	78	0	854	933	0	0	
377	1.418	1.482	106	0	0	0	0	0	11	0	33	46	0	0	
378	1.418	1.482	0	0	0	0	48	1	27	1	142	219	0	0	
379	1.418	1.482	146	0	0	0	0	0	4	0	18	22	0	0	
380	1.418	1.482	85	0	0	0	0	0	1	0	14	16	0	0	
381	1.418	1.482	64	0	0	0	0	0	1	0	14	16	0	0	
382	1.418	1.482	51	0	0	0	0	0	1	0	13	14	0	0	
383	1.418	1.482	127	0	0	0	0	0	5	0	21	27	0	0	
384	1.418	1.482	127	0	56	0	0	0	3	0	17	20	0	0	
385	1.418	1.482	149	0	0	0	0	0	3	0	17	20	0	0	
386	1.418	1.482	149	218	0	0	0	0	9	0	28	37	0	0	
387	1.418	1.482	38	0	0	0	0	0	1	0	14	16	0	0	
388	1.418	1.482	42	0	0	0	0	0	1	0	13	14	0	0	
389	1.418	1.482	170	0	0	0	0	0	4	0	18	22	0	0	
390	1.418	1.482	106	0	0	0	0	0	2	0	16	18	0	0	
391	1.418	1.482	85	0	0	0	0	0	3	0	17	20	0	0	
392	1.418	1.482	170	0	0	0	0	0	4	0	18	22	0	0	
393	1.418	1.482	191	0	0	0	0	0	6	0	23	29	0	0	
394	1.418	1.482	0	0	0	0	0	0	1	0	14	16	0	0	
395	1.418	1.482	4	0	0	0	0	0	7	0	25	33	0	0	
396	1.418	1.482	64	0	0	0	0	0	1	0	14	16	0	0	
397	1.418	1.482	149	0	0	0	0	0	4	0	20	24	0	0	
398	1.298	1.332	132	0	0	0	0	5	72	1	175	254	0	0	
399	1.298	1.332	154	0	0	0	0	2	29	0	85	116	0	0	
400	1.298	1.332	88	0	0	0	0	0	2	0	28	30	0	0	
401	1.298	1.332	0	0	0	0	48	5	73	1	277	405	0	0	

402	1.298	1.332	154	0	0	0	2	25	0	77	104	0	0
403	1.298	1.332	0	655	0	0	1	8	0	40	49	0	0
404	1.298	1.332	175	0	690	0	1	10	0	44	55	0	0
405	1.298	1.332	197	0	0	0	1	8	0	40	49	0	0
406	1.298	1.332	88	0	0	0	1	17	0	61	79	0	0
407	1.298	1.332	35	0	0	0	1	10	0	44	55	0	0
408	1.298	1.332	0	0	0	0	1	12	0	48	61	0	0
409	1.298	1.332	0	0	0	0	0	2	0	29	32	0	0
410	1.298	1.332	154	0	0	0	1	8	0	40	49	0	0
411	1.298	1.332	110	0	0	0	0	4	0	32	36	0	0
412	1.298	1.332	88	0	0	19	2	27	0	119	167	0	0
413	1.298	1.332	66	0	0	0	0	2	0	28	30	0	0
414	1.298	1.332	0	0	0	0	0	2	0	29	32	0	0
415	1.298	1.332	197	0	0	0	0	6	0	36	43	0	0
416	1.298	1.332	211	0	0	0	1	17	0	60	79	0	0
417	1.298	1.332	0	0	0	0	0	0	3	40	43	0	0
418	1.298	1.332	0	0	0	0	1	0	10	80	91	0	0
419	1.364	1.386	91	0	0	0	3	17	0	225	244	0	0
420	1.364	1.386	182	0	0	0	0	1	0	197	199	0	0
421	1.364	1.386	191	0	0	0	1	3	0	201	205	0	0
422	1.364	1.386	387	218	0	0	2	9	0	211	222	0	0
423	1.364	1.386	0	0	0	0	11	64	13	392	481	0	0
424	1.364	1.386	5	1319	0	0	2	14	0	219	234	0	0
425	1.364	1.386	0	561	0	216	0	0	0	613	829	0	0
426	1.364	1.386	0	0	0	76	18	105	13	611	824	0	0
427	1.364	1.386	0	0	0	0	1	5	0	203	209	0	0
428	1.364	1.386	0	699	0	0	2	12	0	20	34	0	0
429	1.349	1.417	455	0	0	7	0	38	9	58	112	0	0
430	1.349	1.417	282	0	0	0	0	13	0	23	36	0	0
431	1.349	1.417	644	0	0	0	0	53	0	57	110	0	0
432	1.338	1.438	347	0	0	0	1	20	0	40	60	0	0
433	1.338	1.438	0	0	0	0	0	0	0	27	27	0	0
434	1.338	1.438	338	0	0	0	1	19	0	39	58	0	0
435	1.338	1.438	180	0	0	0	0	17	0	38	55	0	0
436	1.338	1.438	406	0	0	90	2	85	0	142	319	0	0
437	1.338	1.438	158	0	0	0	0	14	0	36	51	0	0
438	1.338	1.438	180	436	0	0	1	43	0	54	99	0	0
439	1.338	1.438	338	0	0	0	0	14	0	36	51	0	0
440	1.338	1.438	0	0	0	0	0	0	17	38	55	0	0
441	1.302	1.536	348	0	0	0	0	13	1	34	48	0	0
442	1.302	1.536	383	0	0	17	0	40	2	78	137	0	0
443	1.302	1.536	426	0	0	0	0	22	1	43	66	0	0
444	1.426	1.471	414	598	531	0	0	44	3	157	204	0	0
445	1.426	1.471	430	0	0	0	0	4	0	39	44	0	0
446	1.426	1.471	0	0	0	0	0	0	0	26	26	0	0
447	1.426	1.471	215	0	654	42	0	35	3	244	323	0	0
448	1.426	1.471	296	0	0	0	0	4	0	39	44	0	0
449	1.426	1.471	215	0	0	0	0	2	0	31	33	0	0
450	1.426	1.471	269	430	0	0	0	11	1	57	69	0	0
451	1.426	1.471	161	0	0	0	0	2	0	31	33	0	0
452	1.426	1.471	0	0	0	0	0	26	2	104	133	0	0
453	1.426	1.471	54	75	0	0	0	9	1	52	61	0	0
454	0.000	0.000	0	0	0	6	4	105	0	1223	1338	0	0
455	0.000	0.000	0	0	0	5	2	48	12	937	1004	0	0
456	0.000	0.000	0	0	0	0	2	60	0	843	905	0	0
457	0.000	0.000	0	0	0	0	2	56	0	819	878	0	0
458	0.000	0.000	0	0	0	0	3	75	0	960	1038	0	0
459	0.000	0.000	0	0	0	0	5	141	0	1448	1594	0	0
460	1.488	1.359	0	0	0	0	48	88	0	1623	1759	0	0
461	1.488	1.359	0	0	0	0	58	105	0	1749	1911	0	0
462	1.488	1.359	405	561	610	1	35	63	0	1440	1538	0	0
463	1.488	1.359	0	0	0	0	17	31	0	1198	1246	0	0
464	1.601	1.905	339	0	0	0	4	14	0	490	509	0	0
465	1.601	1.905	197	580	0	3	28	101	12	1149	1293	0	0
466	1.259	1.633	397	0	1281	0	50	321	0	450	821	0	0
467	1.259	1.633	655	0	0	67	28	178	0	377	649	0	0
468	1.259	1.633	0	0	0	0	129	834	0	1049	2011	0	0
469	1.259	1.633	20	699	0	0	47	303	244	777	1371	0	0
470	1.328	1.706	123	0	0	61	3	24	25	615	728	0	0
471	1.328	1.706	598	224	0	0	1	7	0	415	421	0	0
472	1.328	1.706	368	0	0	0	5	37	0	180	221	0	0
473	1.328	1.706	54	0	0	0	4	29	0	167	201	0	0
474	1.488	1.359	160	0	0	0	1	1	0	973	974	0	0
475	1.488	1.359	496	0	0	105	29	53	0	2210	2397	0	0
476	1.488	1.359	840	0	0	0	2	3	60	1925	1990	0	0
477	1.363	1.449	288	0	0	0	5	21	0	217	242	0	0
478	1.363	1.449	422	2204	0	37	22	93	0	312	464	0	0
479	1.363	1.449	154	0	0	327	45	193	0	686	1251	0	0
480	1.363	1.449	549	0	0	0	5	21	85	342	452	0	0
481	1.363	1.449	134	0	0	0	2	8	0	207	217	0	0
482	1.363	1.449	134	0	0	0	0	1	0	202	203	0	0
483	1.413	1.730	933	1980	0	33	7	157	5	380	581	0	0
484	1.413	1.730	168	0	0	0	3	80	0	173	257	0	0
485	1.018	1.221	12	0	0	126	5	0	215	1793	2140	0	0
486	1.305	1.430	467	0	0	0	0	10	0	28	38	0	0
487	1.305	1.430	425	118	0	30	2	145	0	126	303	0	0
488	1.305	1.430	268	0	0	0	1	51	0	52	104	0	0

489	1.305	1.430	255	249	0	0	0	0	24	0	36	61	0	0
490	1.305	1.430	361	0	0	0	0	0	31	0	41	73	0	0
491	1.305	1.430	0	0	0	0	0	0	24	0	36	61	0	0
492	1.305	1.430	489	0	857	0	0	2	145	20	139	306	0	0
493	1.265	1.129	0	655	0	0	0	2	8	0	297	306	0	0
494	1.265	1.129	368	0	0	0	7	1	6	0	308	322	0	0
495	1.265	1.129	0	0	0	0	0	9	37	0	407	459	0	0
496	1.265	1.129	0	0	0	0	1118	57	227	0	3332	4734	0	0
497	1.265	1.129	0	0	0	0	83	69	278	0	1074	1504	0	0
498	1.265	1.129	0	0	0	0	0	21	83	0	490	594	0	0
499	1.265	1.129	0	0	0	0	4	28	113	0	561	707	0	0
500	1.265	1.129	0	0	0	0	0	8	30	0	382	420	0	0
501	1.265	1.129	501	0	0	0	0	1	4	0	289	294	0	0
502	1.265	1.129	226	0	0	0	0	1	3	0	288	291	0	0
503	1.265	1.129	0	0	0	0	492	25	99	82	2016	2714	0	0
504	1.265	1.129	0	0	0	0	170	6	23	21	850	1069	0	0
505	1.283	1.518	181	499	0	0	0	0	20	6	24	50	0	0
506	1.283	1.518	144	0	0	0	0	0	17	0	18	35	0	0
507	1.283	1.518	289	0	0	0	0	1	52	0	43	96	0	0
508	1.283	1.518	199	0	0	0	0	0	20	0	20	40	0	0
509	1.283	1.518	116	268	0	0	30	1	43	0	59	132	0	0
510	1.283	1.518	155	0	0	0	0	0	15	0	16	31	0	0
511	1.398	1.695	981	605	0	0	49	1	641	14	156	861	0	0
512	1.398	1.695	192	0	0	0	0	6	3694	0	503	4203	0	0
513	1.556	2.289	223	0	0	0	0	3	3	0	71	77	0	0
514	1.556	2.289	56	0	0	0	0	0	0	6	114	120	0	0
515	1.270	1.514	236	0	0	0	0	12	33	0	45	90	0	0
516	1.270	1.514	320	0	0	0	0	5	15	0	41	61	0	0
517	1.270	1.514	295	0	0	0	0	6	17	0	41	64	0	0
518	1.282	1.626	143	2143	0	0	0	0	49	0	169	218	0	0
519	1.282	1.626	204	0	0	0	17	0	20	0	134	171	0	0
520	1.282	1.626	331	0	0	0	0	0	7	14	91	112	0	0
521	1.282	1.626	347	630	0	0	0	0	7	0	51	58	0	0
522	1.329	1.541	354	0	0	0	0	0	13	0	28	41	0	0
523	1.329	1.541	304	0	0	0	0	0	10	0	26	36	0	0
524	1.329	1.541	333	0	0	0	18	0	26	0	57	100	0	0
525	1.216	1.301	536	0	0	0	0	0	8	0	37	45	0	0
526	1.216	1.301	224	0	0	0	0	0	4	0	29	33	0	0
527	1.216	1.301	384	0	0	0	4	0	13	3	96	115	0	0
528	1.355	1.606	586	268	0	0	0	2	144	5	137	288	0	0
529	1.355	1.606	1392	175	0	0	134	4	209	5	231	583	0	0
530	1.358	1.880	200	0	0	0	0	2	7	0	12	21	0	0
531	1.358	1.880	237	0	0	0	10	2	10	0	34	56	0	0
532	1.358	1.880	310	0	0	0	0	2	8	0	14	24	0	0
533	1.358	1.880	127	0	0	0	0	1	5	7	21	34	0	0
534	1.270	1.514	197	0	0	0	199	14	39	0	163	416	0	0
535	1.270	1.514	222	0	0	0	11	10	26	9	63	119	0	0
536	1.378	1.726	836	449	0	0	0	3	11	0	170	190	0	0
537	1.424	1.818	271	0	0	0	0	1	14	0	22	38	0	0
538	1.424	1.818	271	0	0	0	3	4	39	4	59	109	0	0
539	1.424	1.818	136	0	0	0	0	1	6	0	13	19	0	0
540	1.424	1.818	248	480	0	0	0	2	23	0	32	57	0	0
541	1.424	1.818	288	0	0	0	0	1	14	0	22	38	0	0
542	1.270	1.674	1198	0	0	0	7	0	34	10	100	151	0	0
543	1.286	1.560	1031	0	1347	0	35	3	44	0	262	344	0	0
544	1.388	1.767	756	0	494	0	0	0	42	6	216	264	0	0
545	1.270	1.606	328	0	0	0	267	10	124	26	484	912	0	0
546	1.270	1.606	448	0	0	0	0	2	20	0	170	192	0	0
547	1.270	1.606	466	193	0	0	1	5	59	0	194	259	0	0
548	1.270	1.606	7	561	0	368	0	11	131	0	104	246	0	0
549	1.578	2.068	941	492	0	0	48	9	37	0	183	277	0	0
550	1.317	1.654	1216	137	0	0	22	6	74	3	92	197	0	0
551	1.379	1.687	241	0	0	0	0	0	16	0	28	44	0	0
552	1.379	1.687	222	0	0	0	0	0	16	0	28	44	0	0
553	1.379	1.687	130	0	0	0	4	0	39	0	56	99	0	0
554	1.379	1.687	241	0	0	0	0	0	20	0	45	65	0	0
555	1.379	1.687	222	243	0	0	0	0	133	0	155	288	0	0
556	1.379	1.687	0	0	0	0	0	0	0	0	4	4	0	0
557	1.418	1.482	271	0	0	0	0	0	7	0	11	18	0	0
558	1.420	1.762	329	0	0	0	0	0	2	0	15	18	0	0
559	1.420	1.762	315	0	0	0	0	0	2	0	15	18	0	0
560	1.420	1.762	92	305	0	0	3	1	8	0	66	78	0	0
561	1.420	1.762	220	0	0	0	0	0	2	0	14	16	0	0
562	1.420	1.762	201	0	0	0	0	0	2	0	14	16	0	0
563	1.420	1.762	0	0	0	0	0	0	0	0	7	7	0	0
564	1.420	1.762	18	0	0	0	0	0	2	0	17	19	0	0
565	1.263	1.158	0	0	0	0	0	9	14	0	361	384	0	0
566	1.263	1.158	0	0	0	0	0	65	101	0	466	632	0	0
567	1.263	1.158	204	0	0	0	92	136	212	0	766	1206	0	0
568	1.263	1.158	0	0	0	0	1338	210	327	0	3187	5061	0	0
569	1.263	1.158	0	0	0	0	0	18	28	0	378	423	0	0
570	1.263	1.158	0	0	0	0	498	66	102	0	1379	2045	0	0
571	1.263	1.158	715	0	0	0	9	2	4	0	255	270	0	0
572	1.263	1.158	561	0	0	0	10	2	3	0	257	272	0	0
573	1.263	1.158	0	0	0	0	10	2	3	0	257	272	0	0
574	1.263	1.158	0	0	0	0	39	15	24	0	444	521	0	0
575	1.263	1.158	0	0	0	0	85	30	47	93	727	983	0	0

576	1.263	1.158	434	0	759	0	0	18	28	0	378	423	0	0
577	1.182	1.413	271	0	0	0	0	0	35	0	25	60	0	0
578	1.182	1.413	232	274	0	0	0	0	27	0	21	48	0	0
579	1.182	1.413	93	0	0	0	3	0	48	0	33	84	0	0
580	1.182	1.413	271	0	0	0	0	0	30	0	22	52	0	0
581	1.182	1.413	251	0	0	0	0	0	46	4	33	83	0	0
582	1.487	1.692	520	0	0	0	0	2	11	0	66	79	0	0
583	1.487	1.692	292	0	1309	0	0	6	25	3	114	149	0	0
584	1.487	1.692	650	549	0	0	47	3	13	0	155	219	0	0
585	1.487	1.692	357	0	0	0	0	1	5	0	57	64	0	0
586	1.618	1.872	251	0	0	0	0	0	5	0	28	33	0	0
587	1.618	1.872	627	1029	0	0	0	0	27	4	117	148	0	0
588	1.618	1.872	815	424	0	0	29	0	16	0	112	157	0	0
589	1.618	1.872	210	0	0	0	0	0	4	0	25	29	0	0
590	1.594	1.955	213	0	0	0	0	0	3	0	45	48	0	0
591	1.594	1.955	740	0	0	0	9	0	15	0	81	104	0	0
592	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
593	1.805	1.627	329	0	0	6334	37	16	450	0	900	1404	0	0
594	1.805	1.627	526	0	0	0	0	1	21	0	126	148	0	0
595	1.805	1.627	0	0	895	0	0	2	53	0	178	233	0	0
596	1.805	1.627	329	0	0	0	0	1	21	0	126	148	0	0
597	1.805	1.627	33	0	0	0	0	6	175	0	381	562	0	0
598	1.805	1.627	0	1	0	6641	0	8	228	0	468	704	0	0
599	1.805	1.627	381	0	0	0	2	20	541	0	991	1554	0	0
600	1.805	1.627	296	0	0	0	0	6	166	8	396	577	0	0
601	1.448	1.728	844	754	0	0	0	6	115	3	161	285	0	0
602	1.302	1.526	0	0	732	0	220	15	70	9	314	628	0	0
603	1.302	1.526	1021	274	0	0	25	5	24	0	128	181	0	0
604	1.273	1.485	257	0	0	0	0	1	7	0	18	25	0	0
605	1.273	1.485	387	0	0	0	0	1	10	4	24	39	0	0
606	1.273	1.485	570	175	0	0	14	2	21	0	41	78	0	0
607	1.479	1.919	313	0	0	0	0	3	7	0	40	49	0	0
608	1.479	1.919	568	362	0	0	7	6	11	3	101	128	0	0
609	1.301	1.678	0	0	0	0	105	1	4	0	164	274	0	0
610	1.301	1.678	464	910	0	0	0	4	24	10	92	130	0	0
611	1.301	1.678	151	0	228	0	0	2	12	0	46	60	0	0
612	1.301	1.678	406	0	820	0	0	5	27	0	61	93	0	0
613	1.301	1.678	93	0	0	0	0	1	3	0	36	39	0	0
614	1.317	1.561	163	0	0	0	0	0	5	0	8	14	0	0
615	1.317	1.561	236	0	0	0	0	0	11	0	15	26	0	0
616	1.317	1.561	232	0	0	0	3	0	28	0	58	89	0	0
617	1.317	1.561	145	0	0	0	0	0	4	0	6	10	0	0
618	1.317	1.561	327	362	0	0	0	0	22	0	29	50	0	0
619	1.373	1.722	194	0	0	0	0	0	2	3	33	38	0	0
620	1.373	1.722	162	0	0	0	0	0	2	0	7	9	0	0
621	1.373	1.722	177	0	0	0	0	0	3	0	8	11	0	0
622	1.373	1.722	212	0	0	0	0	0	3	0	9	13	0	0
623	1.373	1.722	212	281	0	0	12	1	13	0	48	75	0	0
624	1.373	1.722	201	0	0	0	0	1	3	0	8	11	0	0
625	1.486	1.784	171	0	0	0	0	0	2	0	12	13	0	0
626	1.486	1.784	171	0	0	0	0	0	2	0	12	13	0	0
627	1.486	1.784	322	0	0	0	0	0	3	0	17	21	0	0
628	1.486	1.784	171	0	0	0	0	0	1	0	10	12	0	0
629	1.486	1.784	308	324	0	0	0	0	8	0	34	42	0	0
630	1.486	1.784	171	0	0	0	0	1	3	71	75	0	0	0
631	1.441	1.807	195	0	0	0	0	1	6	0	56	63	0	0
632	1.441	1.807	452	0	303	0	21	1	6	4	188	220	0	0
633	1.441	1.807	504	580	0	0	0	1	3	0	42	45	0	0
634	1.542	1.860	890	256	0	0	17	0	78	3	132	230	0	0
635	1.643	2.022	302	0	0	0	0	1	4	0	14	19	0	0
636	1.643	2.022	388	281	0	0	8	3	9	3	55	78	0	0
637	1.643	2.022	453	0	0	0	0	2	6	0	19	26	0	0
638	1.604	2.068	115	0	0	0	0	0	3	3	14	20	0	0
639	1.604	2.068	296	312	0	0	19	0	26	0	60	105	0	0
640	1.604	2.068	164	0	0	0	0	0	5	0	14	19	0	0
641	1.604	2.068	151	0	0	0	0	0	5	0	14	19	0	0
642	1.339	1.592	145	0	0	0	0	0	6	0	28	33	0	0
643	1.339	1.592	163	0	0	0	0	0	11	0	30	42	0	0
644	1.339	1.592	163	0	0	0	0	0	6	0	28	33	0	0
645	1.339	1.592	199	0	0	0	0	0	8	7	45	61	0	0
646	1.339	1.592	199	224	0	0	0	1	38	0	44	83	0	0
647	1.339	1.592	145	231	0	0	112	1	20	0	95	228	0	0
648	1.339	1.592	127	0	0	0	5	0	4	0	30	39	0	0
649	1.621	1.836	747	0	0	0	0	0	5	0	23	29	0	0
650	1.621	1.836	567	0	0	0	0	0	4	0	18	21	0	0
651	1.621	1.836	252	449	0	0	14	0	12	12	144	182	0	0
652	1.621	1.836	412	0	0	0	0	0	2	0	12	14	0	0
653	1.251	1.524	381	81	0	0	0	0	2	0	30	32	0	0
654	1.251	1.524	167	0	0	0	241	7	92	19	235	594	0	0
655	1.251	1.524	381	0	0	0	0	0	2	0	30	32	0	0
656	1.251	1.524	286	281	0	0	11	1	19	0	44	76	0	0
657	1.251	1.524	429	0	0	0	0	0	4	0	31	36	0	0
658	1.251	1.524	0	0	0	0	0	6	77	0	66	149	0	0
659	1.251	1.524	333	0	0	0	0	1	9	0	33	42	0	0
660	1.621	1.836	0	0	0	0	0	0	0	0	6	6	0	0
661	1.621	1.836	0	0	0	0	0	0	0	0	6	6	0	0
662	1.621	1.836	0	0	0	0	0	0	0	0	6	6	0	0

663	1.621	1.836	0	0	0	0	0	0	0	0	6	6	0	0
664	1.621	1.836	0	0	0	0	0	0	0	0	6	6	0	0
665	1.652	1.894	175	0	0	0	0	0	0	6	14	20	0	0
666	1.652	1.894	438	0	0	0	0	0	0	4	12	15	0	0
667	1.652	1.894	394	0	0	0	0	0	0	3	10	13	0	0
668	1.652	1.894	350	0	0	0	0	0	0	4	12	15	0	0
669	1.652	1.894	394	0	0	0	4	0	5	0	19	28	0	0
670	1.652	1.894	263	0	0	0	0	0	1	0	7	8	0	0
671	1.652	1.894	350	0	0	0	0	0	3	0	10	13	0	0
672	1.652	1.894	0	0	0	0	0	0	0	9	47	56	0	0
673	1.626	1.951	407	0	0	0	0	1	5	0	24	29	0	0
674	1.626	1.951	761	243	0	0	3	3	20	0	69	95	0	0
675	1.598	1.869	419	0	0	0	0	1	14	0	27	43	0	0
676	1.598	1.869	310	0	0	0	0	1	8	0	21	29	0	0
677	1.598	1.869	149	0	0	0	90	2	27	0	146	265	0	0
678	1.598	1.869	869	948	0	0	17	3	42	0	77	139	0	0
679	1.598	1.869	823	623	0	0	26	3	37	0	83	148	0	0
680	1.598	1.869	0	0	0	0	0	0	0	0	12	12	0	0
681	1.598	1.869	0	0	0	0	0	0	0	0	12	12	0	0
682	1.598	1.869	0	0	0	0	0	0	0	9	53	62	0	0
683	1.598	1.869	0	0	0	0	0	0	0	0	12	12	0	0
684	1.598	1.869	0	0	334	0	0	0	0	0	12	12	0	0
685	1.701	1.689	0	0	0	0	0	5	31	0	66	103	0	0
686	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
687	1.701	1.689	225	0	0	0	0	5	31	0	66	103	0	0
688	1.701	1.689	0	0	0	0	0	4	26	0	64	95	0	0
689	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
690	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
691	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
692	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
693	1.701	1.689	702	0	0	0	666	37	223	0	483	1409	0	0
694	1.701	1.689	421	0	0	0	0	4	26	0	64	95	0	0
695	1.784	1.867	1359	0	0	0	0	3	47	4	219	273	0	0
696	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
697	1.791	1.756	208	0	0	0	0	0	0	0	2	2	0	0
698	1.701	1.689	0	0	0	0	0	0	0	16	63	79	0	0
699	1.701	1.689	562	0	0	0	0	0	0	16	63	79	0	0
700	1.701	1.689	0	0	0	0	0	2	10	17	37	66	0	0
701	1.639	1.746	237	0	0	0	0	0	2	0	8	10	0	0
702	1.639	1.746	237	0	0	0	0	0	2	0	8	10	0	0
703	1.639	1.746	288	0	0	0	0	0	3	0	9	12	0	0
704	1.639	1.746	220	530	0	0	0	0	6	0	16	22	0	0
705	1.639	1.746	271	0	0	0	0	0	2	11	54	67	0	0
706	1.639	1.746	254	0	0	0	22	0	7	0	55	84	0	0
707	1.639	1.746	261	0	0	0	0	0	2	0	8	10	0	0
708	1.639	1.746	237	0	0	0	0	0	2	0	8	10	0	0
709	2.000	3.333	3	0	0	0	0	0	88	0	260	349	0	0
710	1.671	1.679	234	0	0	0	3	0	6	0	115	127	0	0
711	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
712	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
713	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
714	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
715	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
716	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
717	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
718	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
719	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
720	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
721	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
722	1.784	1.867	0	0	0	0	0	0	0	0	11	11	0	0
723	1.791	1.756	208	0	0	0	0	0	0	0	2	2	0	0
724	1.791	1.756	208	0	0	0	0	0	0	0	2	2	0	0
725	1.791	1.756	208	0	0	0	6	3	14	9	92	124	0	0
726	1.791	1.756	208	0	0	0	0	0	0	0	2	2	0	0
727	1.791	1.756	208	0	0	0	0	0	0	0	2	2	0	0
728	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
729	1.701	1.689	0	0	0	0	0	0	0	0	55	55	0	0
730	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
731	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
732	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
733	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
734	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
735	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
736	1.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
737	0.000	3.766	0	0	0	0	0	0	0	0	0	0	0	0
738	0.000	0.000	7	0	0	0	0	0	0	3	48	51	0	0
739	2.000	3.333	0	0	0	0	67	4	0	188	845	1105	0	0
740	2.000	3.333	0	0	0	0	304	7	0	251	1451	2013	0	0
741	2.000	3.333	0	0	0	0	0	1	105	41	424	571	0	0
742	1.700	1.897	641	0	0	0	0	2	6	0	63	70	0	0
743	1.700	1.897	374	0	0	0	0	1	5	0	59	66	0	0
744	1.700	1.897	240	0	0	0	0	2	6	0	94	101	0	0
745	1.700	1.897	534	0	0	0	8	1	4	0	103	116	0	0
746	1.515	1.654	189	0	0	0	0	0	3	0	10	14	0	0
747	1.515	1.654	427	0	0	0	11	0	3	0	22	36	0	0
748	1.515	1.654	302	0	0	0	0	0	2	0	8	10	0	0
749	1.515	1.654	302	0	0	0	0	0	2	0	9	12	0	0

750	1.515	1.654	189	0	0	0	0	0	3	0	10	13	0	0
751	1.515	1.654	226	0	0	0	0	0	2	0	9	12	0	0
752	1.515	1.654	151	0	0	0	0	0	1	0	8	9	0	0
753	1.515	1.654	208	0	0	0	0	0	3	0	10	14	0	0
754	1.515	1.654	0	0	0	0	0	0	1	0	8	9	0	0
755	1.515	1.654	113	0	0	0	0	0	2	7	40	50	0	0
756	1.515	1.654	113	0	0	0	0	0	2	0	8	10	0	0
757	1.515	1.654	189	0	0	0	35	1	11	0	58	105	0	0
758	1.515	1.654	264	0	0	0	0	0	3	0	10	13	0	0
759	1.515	1.654	132	0	0	0	0	0	2	0	8	10	0	0
760	1.515	1.654	151	486	0	0	0	1	11	0	18	31	0	0
761	1.515	1.654	94	0	0	0	0	0	1	0	7	8	0	0
762	1.515	1.654	283	0	0	0	0	0	3	0	10	14	0	0
763	1.515	1.654	0	0	0	0	0	0	0	0	7	7	0	0
764	1.745	2.042	0	0	0	0	0	0	0	0	27	27	0	0
765	1.745	2.042	252	0	0	0	0	0	7	0	32	40	0	0
766	1.745	2.042	145	0	0	0	0	0	6	0	31	37	0	0
767	1.745	2.042	163	0	0	0	0	0	9	0	33	42	0	0
768	1.745	2.042	145	0	0	0	0	0	9	0	33	42	0	0
769	1.745	2.042	0	0	0	0	99	1	43	0	133	276	0	0
770	1.745	2.042	91	0	0	0	0	0	9	0	33	42	0	0
771	1.745	2.042	91	0	0	0	0	0	7	0	32	40	0	0
772	1.745	2.042	109	0	0	0	0	0	9	0	33	42	0	0
773	1.745	2.042	109	0	0	0	0	0	4	0	30	35	0	0
774	1.745	2.042	526	0	0	0	0	0	12	0	36	48	0	0
775	1.745	2.042	308	0	0	0	0	0	7	5	54	66	0	0
776	1.745	2.042	0	0	0	0	0	0	0	0	27	27	0	0
777	1.745	2.042	109	0	0	0	0	0	7	0	32	40	0	0
778	1.745	2.042	36	0	0	0	0	0	10	0	34	45	0	0
779	1.745	2.042	0	0	0	0	0	0	0	0	27	27	0	0
780	1.745	2.042	109	1612	0	0	0	1	21	0	42	63	0	0
781	1.765	1.782	107	0	0	0	0	0	0	0	12	12	0	0
782	1.765	1.782	107	0	0	0	0	0	0	0	12	12	0	0
783	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
784	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
785	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
786	1.765	1.782	107	0	0	0	0	0	0	0	12	12	0	0
787	1.765	1.782	107	0	0	0	0	0	0	0	12	12	0	0
788	1.765	1.782	107	0	0	0	0	0	0	3	39	42	0	0
789	1.729	2.189	107	175	0	0	7	13	7	8	207	242	0	0
790	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
791	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
792	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
793	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
794	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
795	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
796	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
797	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
798	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
799	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
800	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0	0
801	0.000	0.000	0	0	0	0	0	0	0	0	7	7	0	0
802	1.730	1.730	173	0	0	0	0	0	0	0	19	19	0	0
803	1.730	1.730	173	0	0	0	0	0	0	0	19	19	0	0
804	1.730	1.730	173	0	0	0	0	0	3	0	71	74	0	0
805	1.803	1.873	247	0	0	0	0	0	0	0	10	10	0	0
806	1.803	1.873	247	0	0	0	0	0	0	0	10	10	0	0
807	1.803	1.873	247	0	0	0	3	0	33	3	160	199	0	0
808	1.500	1.982	34	0	0	0	16	0	6	11	598	631	0	0
809	1.500	1.982	0	0	0	0	0	4	57	23	917	1002	0	0
810	1.500	1.982	0	0	0	0	274	31	106	51	2590	3052	0	0
811	1.500	1.982	64	0	0	0	11	3	37	8	585	644	0	0
812	1.018	1.221	12	0	0	0	640	22	0	347	2112	3121	0	0
813	1.018	1.221	6	0	0	0	485	16	0	292	1711	2505	0	0
814	1.018	1.221	6	0	0	0	611	27	0	425	2285	3348	0	0
815	1.018	1.221	6	0	0	0	97	5	0	83	497	682	0	0
816	1.018	1.221	6	0	0	0	155	5	0	104	651	916	0	0
817	1.018	1.221	6	0	0	0	58	5	0	54	352	470	0	0
818	1.018	1.221	115	0	0	0	0	11	181	0	279	471	0	0
819	1.018	1.221	0	0	0	0	0	0	0	0	108	108	0	0
820	1.018	1.221	0	0	0	0	0	24	34	25	209	292	0	0
821	1.018	1.221	0	0	0	0	0	1	2	0	110	112	0	0
822	1.018	1.221	0	0	0	0	0	0	0	0	0	0	0	0
823	1.018	1.221	230	0	0	0	1	38	53	0	48	140	0	0
824	0.000	0.000	0	0	0	0	0	2	26	69	97	0	0	0
825	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
826	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
827	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
828	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
829	0.000	0.000	0	0	0	0	35	5	39	546	1270	1895	0	0
830	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
831	0.000	0.000	0	0	0	0	23	1	4	71	193	292	0	0
832	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0
833	1.018	1.221	6	0	0	0	0	3	5	7	25	40	0	0
834	1.018	1.221	0	0	0	0	0	1	1	1	4	7	0	0
835	1.018	1.221	12	0	0	0	0	1	1	1	4	7	0	0
836	1.018	1.221	0	0	0	0	0	0	0	0	0	0	0	0

837	1.018	1.221	6	0	0	0	0	5	8	12	42	67	0	0	
838	1.018	1.221	9	0	0	0	0	2	3	6	19	30	0	0	
839	0.000	0.000	0	0	0	0	0	0	0	0	11	11	0	0	
840	1.299	1.377	0	0	0	0	143	6	31	0	537	717	0	0	
841	1.299	1.377	0	0	0	0	0	9	47	54	572	681	0	0	
842	1.299	1.377	63	0	0	0	1029	46	238	0	2758	4071	0	0	
843	1.299	1.377	0	820	0	0	0	5	27	35	432	499	0	0	
844	1.299	1.377	0	0	0	0	17	10	52	71	712	863	0	0	
845	1.299	1.377	0	0	0	0	0	0	0	0	183	183	0	0	
846	1.299	1.377	0	0	0	0	21	21	106	141	1218	1508	0	0	
847	1.299	1.377	0	0	0	0	0	7	36	47	436	527	0	0	
848	1.299	1.377	317	0	0	0	0	0	2	0	188	191	0	0	
849	1.299	1.377	317	0	0	0	0	0	2	0	187	189	0	0	
850	1.691	1.928	608	0	0	0	0	0	0	3	53	56	0	0	
851	1.557	1.843	659	0	0	0	0	2	28	2	54	86	0	0	
852	1.557	1.843	757	592	0	0	0	3	48	4	83	137	0	0	
853	1.557	1.843	573	0	0	0	16	2	37	3	89	147	0	0	
854	1.661	1.845	390	923	0	0	0	0	23	0	70	93	0	0	
855	1.661	1.845	423	0	340	0	25	0	32	0	87	143	0	0	
856	1.661	1.845	434	0	0	0	0	0	11	0	27	38	0	0	
857	1.661	1.845	228	0	0	0	0	0	8	0	23	31	0	0	
858	1.666	1.813	326	0	0	0	0	0	6	0	19	25	0	0	
859	1.666	1.813	307	524	0	0	4	0	13	0	64	81	0	0	
860	1.666	1.813	383	0	0	0	0	0	5	0	16	20	0	0	
861	1.666	1.813	364	0	0	0	0	0	8	0	23	30	0	0	
862	1.500	1.825	132	0	0	0	0	0	4	0	19	23	0	0	
863	1.500	1.825	182	0	0	0	0	0	6	0	21	27	0	0	
864	1.500	1.825	132	0	0	0	0	0	3	0	18	21	0	0	
865	1.500	1.825	545	0	0	0	8	1	16	0	44	68	0	0	
866	1.500	1.825	562	0	0	0	0	0	12	0	29	42	0	0	
867	1.500	1.825	463	0	0	0	0	0	11	0	28	40	0	0	
868	1.500	1.825	0	0	382	0	10	2	38	15	140	205	0	0	
869	1.500	1.825	297	0	0	0	6	1	27	0	55	89	0	0	
870	1.500	1.825	644	461	0	0	8	1	22	0	51	81	0	0	
871	1.500	1.825	363	499	0	0	0	1	17	0	35	52	0	0	
872	1.500	1.825	380	0	0	0	0	0	9	0	26	35	0	0	
873	1.500	1.825	132	0	0	0	0	0	3	0	18	21	0	0	
874	1.500	1.825	149	0	0	0	0	0	4	0	19	23	0	0	
875	1.500	1.825	182	0	0	0	79	1	34	0	153	267	0	0	
876	1.500	1.825	383	187	0	0	5	0	11	0	35	52	0	0	
877	1.500	1.825	446	349	0	0	7	1	15	0	41	64	0	0	
878	1.500	1.825	363	0	0	0	0	0	11	0	28	40	0	0	
879	1.500	1.825	297	0	0	0	5	0	8	0	31	44	0	0	
880	1.527	1.815	796	0	1990	0	6	5	91	28	236	366	0	0	
881	1.527	1.815	683	0	457	0	58	5	81	0	226	369	0	0	
882	1.527	1.815	764	443	0	0	0	3	44	0	152	198	0	0	
883	1.527	1.815	293	0	0	0	0	1	13	0	129	143	0	0	
884	1.527	1.815	153	0	0	0	0	1	9	0	126	135	0	0	
885	1.527	1.815	130	0	778	0	0	279	3	56	0	385	723	0	0
886	1.814	2.151	324	0	0	0	0	0	11	0	49	60	0	0	
887	1.814	2.151	700	480	0	0	3	0	30	6	146	185	0	0	
888	1.619	1.965	340	910	0	0	0	0	11	0	30	41	0	0	
889	1.619	1.965	309	0	0	0	0	0	4	6	46	56	0	0	
890	1.619	1.965	127	312	0	0	35	0	10	0	103	148	0	0	
891	1.619	1.965	294	0	0	0	0	0	4	0	15	18	0	0	
892	1.581	1.912	386	0	0	0	0	0	7	0	13	20	0	0	
893	1.581	1.912	386	318	0	0	21	0	24	0	60	105	0	0	
894	1.581	1.912	308	0	0	0	0	0	6	7	30	42	0	0	
895	1.758	1.965	745	0	1500	0	114	12	52	17	302	497	0	0	
896	1.758	1.965	1262	0	0	0	0	3	14	0	101	119	0	0	
897	1.692	1.869	306	299	0	0	0	2	16	0	40	58	0	0	
898	1.692	1.869	443	0	0	0	20	0	1	0	53	74	0	0	
899	1.692	1.869	511	0	0	0	0	1	5	0	19	25	0	0	
900	1.692	1.869	330	785	0	0	0	2	19	3	80	104	0	0	
901	1.692	1.869	579	0	0	0	0	1	5	0	18	23	0	0	
902	1.692	1.869	477	0	0	0	0	0	4	0	16	20	0	0	
903	2.015	2.242	464	0	0	0	3	3	3	3	39	51	0	0	
904	1.747	2.024	946	648	0	0	0	3	14	3	112	132	0	0	
905	1.733	1.993	0	0	0	0	92	2	11	4	165	274	0	0	
906	1.733	1.993	604	671	0	0	0	1	8	0	39	49	0	0	
907	1.733	1.993	604	0	0	0	0	1	7	0	39	47	0	0	
908	1.733	1.993	574	549	0	0	0	2	9	0	40	50	0	0	
909	1.790	1.981	1325	592	0	0	0	0	9	9	112	130	0	0	
910	1.793	1.957	187	0	0	0	0	0	2	0	20	22	0	0	
911	1.793	1.957	112	0	0	0	0	0	1	0	19	20	0	0	
912	1.793	1.957	217	0	0	0	0	0	3	0	20	23	0	0	
913	1.793	1.957	94	0	0	0	0	0	1	0	19	20	0	0	
914	1.793	1.957	94	0	0	0	0	0	2	0	19	21	0	0	
915	1.793	1.957	112	0	0	0	0	0	1	0	19	20	0	0	
916	1.793	1.957	150	0	0	0	0	0	3	0	20	24	0	0	
917	1.793	1.957	0	1314	0	0	0	1	23	0	32	55	0	0	
918	1.793	1.957	0	0	0	0	172	1	25	26	176	400	0	0	
919	1.793	1.957	56	0	0	0	0	0	1	0	19	19	0	0	
920	1.793	1.957	0	0	0	0	0	0	0	0	18	18	0	0	
921	1.793	1.957	187	785	0	0	0	0	12	0	25	37	0	0	
922	1.793	1.957	131	0	0	0	0	0	6	0	22	28	0	0	
923	1.793	1.957	225	0	0	0	0	0	6	0	22	28	0	0	

924	1.793	1.957	131	0	0	0	0	2	0	19	21	0	0
925	1.695	1.899	221	0	0	21	1	3	3	50	78	0	0
926	1.695	1.899	530	0	0	0	2	5	0	15	22	0	0
927	1.695	1.899	574	0	0	0	2	4	0	13	18	0	0
928	1.695	1.899	331	0	0	0	1	3	0	12	17	0	0
929	1.299	1.377	0	0	0	29	4	20	0	199	252	0	0
930	1.500	1.982	0	0	0	0	0	0	0	71	71	0	0
931	1.500	1.982	0	0	0	3	0	1	2	1564	1571	0	0
932	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
933	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
934	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
935	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
936	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
937	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
938	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
939	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
940	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
941	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
942	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
943	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
944	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
945	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
946	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
947	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
948	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
949	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
950	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
951	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
952	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
953	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
954	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
955	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
956	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
957	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
958	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
959	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
960	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
961	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
962	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
963	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
964	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
965	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
966	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
967	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
968	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
969	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
970	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
971	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
972	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
973	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
974	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
975	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
976	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
977	1.542	2.055	0	0	0	16	0	0	14	30	0	0	0
978	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
979	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
980	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
981	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
982	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
983	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
984	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
985	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
986	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
987	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
988	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
989	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
990	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
991	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
992	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
993	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
994	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
995	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
996	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
997	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
998	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
999	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
1000	1.430	1.689	151	0	0	0	0	0	0	0	0	0	0
1001	0.875	1.405	62	0	0	0	0	0	0	0	0	0	0
1002	0.875	1.405	42	0	0	0	0	0	0	0	0	0	0
1003	1.858	2.194	141	0	0	0	0	0	0	0	0	0	0
1004	1.789	2.117	71	0	0	0	0	0	0	0	0	0	0
1005	1.105	1.762	124	0	0	0	0	0	0	0	0	0	0
1006	0.000	0.000	0	0	0	0	0	0	0	0	0	0	0
1007	2.118	2.539	85	0	0	0	0	0	0	0	0	0	0
1008	2.202	2.377	99	0	0	0	0	0	0	0	0	0	0
1009	1.741	1.960	112	0	0	0	0	0	0	0	0	0	0
1010	2.042	2.038	96	0	0	13	0	21	0	3	38	0	0

1098 0.000 0.000 0
1099 0.000 0.000 0
1100 0.000 0.000 0
1101 0.000 0.000 0
1102 0.000 0.000 0
1103 0.000 0.000 0
1104 0.000 0.000 0
1105 0.000 0.000 0
1106 0.000 0.000 0
1107 0.000 0.000 0
1108 0.000 0.000 0
1109 0.000 0.000 0
1110 0.000 0.000 0
1111 0.000 0.000 0
1112 0.000 0.000 0
1113 0.000 0.000 0
1114 0.000 0.000 0
1115 0.000 0.000 0
1116 0.000 0.000 0
1117 0.000 0.000 0
1118 0.000 0.000 0
1119 0.000 0.000 0
1120 0.000 0.000 0
1121 0.000 0.000 0
1122 0.000 0.000 0
1123 0.000 0.000 0
1124 0.000 0.000 0
1125 0.000 0.000 0
1126 0.000 0.000 0
1127 0.000 0.000 0
1128 0.000 0.000 0
1129 0.000 0.000 0
1130 0.000 0.000 0
1131 0.000 0.000 0
1132 0.000 0.000 0
1133 0.000 0.000 0
1134 0.000 0.000 0
1135 0.000 0.000 0
1136 0.000 0.000 0
1137 0.000 0.000 0
1138 0.000 0.000 0
1139 0.000 0.000 0
1140 0.000 0.000 0
1141 0.000 0.000 0
1142 0.000 0.000 0
1143 0.000 0.000 0
1144 0.000 0.000 0
1145 0.000 0.000 0
1146 0.000 0.000 0
1147 0.000 0.000 0
1148 0.000 0.000 0
1149 0.000 0.000 0
1150 0.000 0.000 0
1151 0.000 0.000 0
1152 0.000 0.000 0
1153 0.000 0.000 0
1154 0.000 0.000 0
1155 0.000 0.000 0
1156 0.000 0.000 0
1157 0.000 0.000 0
1158 0.000 0.000 0
1159 0.000 0.000 0
1160 0.000 0.000 0
1161 0.000 0.000 0
1162 0.000 0.000 0
1163 0.000 0.000 0
1164 0.000 0.000 0
1165 0.000 0.000 0
1166 0.000 0.000 0
1167 0.000 0.000 0
1168 0.000 0.000 0
1169 0.000 0.000 0
1170 0.000 0.000 0
1171 0.000 0.000 0
1172 0.000 0.000 0
1173 0.000 0.000 0
1174 0.000 0.000 0
1175 0.000 0.000 0
1176 0.000 0.000 0
1177 0.000 0.000 0
1178 0.000 0.000 0
1179 0.000 0.000 0
1180 0.000 0.000 0
1181 0.000 0.000 0
1182 0.000 0.000 0
1183 0.000 0.000 0
1184 0.000 0.000 0

MORNING PEAK

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+-----+
| TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS TR |
| TRACKS +-----+ TRACKS |
| S TRACKS| |S TRACKS|
| KS TRACK| Program : CORDON |KS TRACK|
| CKS TRAC| Version : V7.08 |CKS TRAC|
| ACKS TRA| |ACKS TRA|
| RACKS TR| Date run : 24-JAN-13 |RACKS TR|
| TRACKS T| Time run : 16:02:01 |TRACKS T|
| TRACKS | Platform : Win 95/NT | TRACKS |
| S TRACKS+-----+S TRACKS |
| KS TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS |
+-----+
| TRACKS Licenced to |
| Gabites Porter |
| at : Christchurch, N.Z. |
+-----+
Build Date : 17/01/13 07:32
Parameter version : V7.00
    
```

Network Period Factor : 1.000

Cordon Period Factor : 1.000

GEH Period Factor : 1.000

CSV Output File :

Cordon Data File : QM11CD.ALL*QUEANBEYAN MODEL
 Loaded Network : QM11NL.000 *QUEANBEYAN AM - 2011 ALL
 16400 Links in network

Cordon Number : 1
 Description : *1

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2300	2249	199.	220	21.	110.6	1.5	147.	163	16.	110.9	1.3	346.	383	37.	110.7	*KENDALL Ave. Nth.- Canberra Ave. - St
2079	4373	163.	88	-75.	54.0	6.7	52.	47	-5.	90.4	0.7	215.	135	-80.	62.8	*STEPHENS Rd.- Canberra Ave. - Kendall
4369	2153	72.	66	-6.	91.7	0.7	61.	42	-19.	68.9	2.6	133.	108	-25.	81.2	*MUNRO Rd.- #32_Spendelove St. - Ross
4049	4050	258.	238	-20.	92.2	1.3	155.	191	36.	123.2	2.7	413.	429	16.	103.9	*ROSS Rd.- #106_Munro Rd. - Early St.
2194	2378	124.	144	20.	116.1	1.7	89.	69	-20.	77.5	2.3	213.	213	0.	100.0	*STORNAWAY Rd.- #121_Canberra Ave. - E
3834	3244	53.	49	-4.	92.5	0.6	35.	32	-3.	91.4	0.5	88.	81	-7.	92.0	*CAMPBELL St.- Canberra Ave. - George
3306	3513	394.	461	67.	117.0	3.2	No Back Link Present .				394.	461	67.	117.0	*LOWE St.- Farrer Pl. - Morisset St NB	
3306	2215	No Forward Link Present .					272.	295	23.	108.5	1.4	272.	295	23.	108.5	*LOWE St.- Farrer Pl. - Morisset St SB
4435	3514	241.	191	-50.	79.3	3.4	No Back Link Present .				241.	191	-50.	79.3	*CRAWFORD ST nth of MONARO ST NB	

4436	2761	No Forward Link Present .	223.	311	88.	139.5	5.4	223.	311	88.	139.5	*CRAWFORD ST nth of MONARO St SB
2591	4446	327. 371 44. 113.5 2.4	201.	194	-7.	96.5	0.5	528.	565	37.	107.0	*COLLETT St sth of MORISSET St

Number of links = 11 Number of forward links = 9 Number of back links = 9

TOTALS	FORWARD	BACK	TOTALS		
COUNT	1831.	1235.	3066.		
VOLUME	1828.	1344.	3172.		
CHANGE	-3.	109.	106.		
%	100.	109.	103.		
CORREL.					
COEFF.	0.958	0.969	0.960		
%RMS	21.87	26.61	18.06		
r^2	0.918	0.938	0.922		
GEH	0.1	3.0	1.9		
GEH <5	<7	<10	<12	>12	
#	16	18	18	18	0
%	88.9	100.0	100.0	100.0	0.0

Cordon Number : 2
Description : *2a

		FORWARD					BACK					TOTAL				
NODE1	NODE2	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	
3905	3888	21.	58	37.	276.2	5.9	58.	67	9.	115.5	1.1	79.	125	46.	158.2	*KEALMAN Rd.- Gilmore Rd. - Gregory St.
3888	3889	48.	12	-36.	25.0	6.6	57.	68	11.	119.3	1.4	105.	80	-25.	76.2	*GREGORY St.- #4_Kealman Rd. - John Bull St.
4125	3250	1419.	1400	-19.	98.7	0.5	No Back Link Present .					1419.	1400	-19.	98.7	*LANYON Dr.Gilmore Rd. - Canberra Ave NB
4124	2091	No Forward Link Present .					589.	686	97.	116.5	3.8	589.	686	97.	116.5	*LANYON Dr.Gilmore Rd. - Canberra Ave SB
2921	3234	408.	496	88.	121.6	4.1	118.	108	-10.	91.5	0.9	526.	604	78.	114.8	*THARWA Rd.- Gilmore Pl. - Ross Rd.#58&59
2357	3234	154.	247	93.	160.4	6.6	62.	36	-26.	58.1	3.7	216.	283	67.	131.0	*ROSS Rd.- #132_Fergus Rd. - Tharwa Rd.
2871	4352	20.	54	34.	270.0	5.6	16.	19	3.	118.8	0.7	36.	73	37.	202.8	*McINTOSH St.- at # 27 - NTH/ STH 04 scaled
2388	2739	212.	166	-46.	78.3	3.3	141.	123	-18.	87.2	1.6	353.	289	-64.	81.9	*DONALD Rd.- #14_Garland Ave. - Canberra Ave
2537	2536	270.	293	23.	108.5	1.4	123.	190	67.	154.5	5.4	393.	483	90.	122.9	*CAMERON Rd.- #15_Glebe Ave. - Canberra Ave.
3253	3371	469.	462	-7.	98.5	0.3	248.	218	-30.	87.9	2.0	717.	680	-37.	94.8	*LOWE St. - Opp. School/ Cooma/Monaro St. - Monaro St./Rutledge St.
4442	2472	290.	313	23.	107.9	1.3	130.	138	8.	106.2	0.7	420.	451	31.	107.4	*COLLETT St.- #25 Car park - Leagues Club Lane

Number of links = 11 Number of forward links = 10 Number of back links = 10

TOTALS	FORWARD	BACK	TOTALS		
COUNT	3311.	1542.	4853.		
VOLUME	3501.	1653.	5154.		
CHANGE	190.	111.	301.		
%	106.	107.	106.		
CORREL.					
COEFF.	0.993	0.986	0.990		
%RMS	15.53	27.49	14.15		
r^2	0.987	0.973	0.980		
GEH	3.3	2.8	4.3		
GEH <5	<7	<10	<12	>12	
#	15	20	20	20	0
%	75.0	100.0	100.0	100.0	0.0

Cordon Number : 3
Description : *2b

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2596	3984	422.	448	26.	106.2	1.2	No Back Link Present .					422.	448	26.	106.2	*ATKINSON St.- #19n_Macquoid St. - Bungendore Rd.
2596	3980	No Forward Link Present .					286.	367	81.	128.3	4.5	286.	367	81.	128.3	*ATKINSON St.- #19s_Bungendore Rd. - Macquoid St.
4411	2374	186.	211	25.	113.4	1.8	69.	35	-34.	50.7	4.7	255.	246	-9.	96.5	*ELLERTON Dr.- QCC depot - Bungendore Rd.
3351	3350	56.	87	31.	155.4	3.7	58.	44	-14.	75.9	2.0	114.	131	17.	114.9	*WARROO St sth of BUNGENDORE ST
3350	4450	791.	727	-64.	91.9	2.3	609.	677	68.	111.2	2.7	1400.	1404	4.	100.3	*Bungendore St est of Warrooo St (2009 scaled)

Number of links = 5 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS		
COUNT	1455.	1022.	2477.		
VOLUME	1473.	1123.	2596.		
CHANGE	18.	101.	119.		
%	101.	110.	105.		
CORREL.					
COEFF.	0.997	0.994	0.998		
%RMS	12.66	25.30	8.81		
r^2	0.995	0.987	0.996		
GEH	0.5	3.1	2.4		
GEH	<5	<7	<10	<12	>12
#	8	8	8	8	0
%	100.0	100.0	100.0	100.0	0.0

Cordon Number : 4
Description : *3

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
3407	2093	1018.	1043	25.	102.5	0.8	No Back Link Present .					1018.	1043	25.	102.5	*LANYON Dr - Tomsitt Dr- Hoover Rd NB
3409	4148	No Forward Link Present .					570.	565	-5.	99.1	0.2	570.	565	-5.	99.1	*LANYON Dr - Tomsitt Dr - Hoover Rd SB
2316	2319	260.	257	-3.	98.8	0.2	148.	86	-62.	58.1	5.7	408.	343	-65.	84.1	*HALLORAN Dr.- #44_Jerrabomberra Hill Rd. - Tully Pl.
3005	4238	319.	344	25.	107.8	1.4	83.	96	13.	115.7	1.4	402.	440	38.	109.5	*COOMA Rd.- Candlebark Rd. - Wickerslack 07

Number of links = 4 Number of forward links = 3 Number of back links = 3

TOTALS	FORWARD	BACK	TOTALS
COUNT	1597.	801.	2398.
VOLUME	1644.	747.	2391.
CHANGE	47.	-54.	-7.
%	103.	93.	100.
CORREL.			
COEFF.	1.000	0.990	0.991
%RMS	4.71	16.83	7.66
r^2	0.999	0.980	0.982
GEH	1.2	1.9	0.1

GEH <5 <7 <10 <12 >12
5 6 6 6 0
% 83.3 100.0 100.0 100.0 0.0

Cordon Number : 5
Description : *4

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
4211	3973	1226.	1193	-33.	97.3	0.9	No Back Link Present .					1226.	1193	-33.	97.3	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane WST NB
4210	3224	No Forward Link Present .					347.	347	0.	100.0	0.0	347.	347	0.	100.0	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane EST SB
Number of links =		2				Number of forward links =		1				Number of back links =		1		

	TOTALS	FORWARD	BACK	TOTALS	
COUNT		1226.	347.	1573.	
VOLUME		1193.	347.	1540.	
CHANGE		-33.	0.	-33.	
%		97.	100.	98.	
CORREL.					
COEFF.		0.000	0.000	1.000	
%RMS		0.00	0.00	4.20	
r^2		0.000	0.000	1.000	
GEH		0.9	0.0	0.8	
GEH	<5	<7	<10	<12	>12
#	2	2	2	2	0
%	100.0	100.0	100.0	100.0	0.0

Cordon Number : 6
Description : *5

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL					
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		
2772	2771	441.	481	40.	109.1	1.9	641.	527	-114.	82.2	4.7	1082.	1008	-74.	93.2	*URIARA Rd.- #51_Railway Ave. - Blackall Ave./ EST bound	
NOTE	3740	2771	44.	51	7.	115.9	1.0	22.	8	-14.	36.4	3.6	66.	59	-7.	89.4	*BLACKALL Ave.- #8_Morton St. - Uriara Rd.
NOTE	2156	3114	125.	95	-30.	76.0	2.9	108.	61	-47.	56.5	5.1	233.	156	-77.	67.0	*Morton Street - btw Agnes Ave. and Ross Road
	2718	3230	91.	68	-23.	74.7	2.6	94.	52	-42.	55.3	4.9	185.	120	-65.	64.9	*Surveyor Street - btw Agnes Ave. and Ross Road
	2381	2380	68.	118	50.	173.5	5.2	78.	131	53.	167.9	5.2	146.	249	103.	170.5	*EARLY St. #20_Agnes Ave - Ross Rd
NOTE	3283	2195	938.	886	-52.	94.5	1.7	No Back Link Present .					938.	886	-52.	94.5	*CANBERRA Ave.Tharwa Rd. - Lanyon Dr./ KERB&Middle Lane EB 2004
	2987	2191	No Forward Link Present .					1364.	1361	-3.	99.8	0.1	1364.	1361	-3.	99.8	*CANBERRA Ave.Lanyon Dr. - Ross Rd.KERB&Middle Lane WB 2007
	2446	2445	35.	57	22.	162.9	3.2	19.	36	17.	189.5	3.2	54.	93	39.	172.2	*CREST PARK Pde.- #20_Weir Pl. - Telopea Cresc. 07
Number of links =		8				Number of forward links =		7				Number of back links =		7			

	TOTALS	FORWARD	BACK	TOTALS	
COUNT		1742.	2326.	4068.	
VOLUME		1756.	2176.	3932.	
CHANGE		14.	-150.	-136.	
%		101.	94.	97.	
CORREL.					
COEFF.		0.994	0.994	0.993	
%RMS		15.36	17.49	12.99	
r^2		0.989	0.989	0.986	
GEH		0.3	3.2	2.2	
GEH	<5	<7	<10	<12	>12
#	11	14	14	14	0
%	78.6	100.0	100.0	100.0	0.0

Cordon Number : 7
 Description : *6

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
4390	4004	180.	127	-53.	70.6	4.3	79.	129	50.	163.3	4.9	259.	256	-3.	98.8	*COLLETT St.- #119_Erin St. - Campbell St.
2365	2362	126.	140	14.	111.1	1.2	92.	76	-16.	82.6	1.7	218.	216	-2.	99.1	*ERIN St.- #1_Crawford St. - Collett St.
2997	2995	590.	578	-12.	98.0	0.5	535.	547	12.	102.2	0.5	1125.	1125	0.	100.0	*CRAWFORD St.- Campbell St-Killard St.
2981	4291	66.	119	53.	180.3	5.5	24.	64	40.	266.7	6.0	90.	183	93.	203.3	*ANTILL St.- #11_Campbell St. - Crawford St.
3126	3511	No Forward Link Present .					311.	300	-11.	96.5	0.6	311.	300	-11.	96.5	*LOWE St. - Morisset St. - Campbell St./ NTH bound. 05
4307	3127	281.	268	-13.	95.4	0.8	No Back Link Present .				281.	268	-13.	95.4	*LOWE St. - Morisset St. - Campbell St./ STH bound. 05	
4311	3290	1018.	1017	-1.	99.9	0.0	No Back Link Present .				1018.	1017	-1.	99.9	*FARRER Pl. -Campbell St. - Lowe St EB	
4317	3183	No Forward Link Present .					934.	746	-188.	79.9	6.5	934.	746	-188.	79.9	*FARRER Pl. -Campbell St. - Lowe St WB

Number of links = 8 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
COUNT	2261.	1975.	4236.
VOLUME	2249.	1862.	4111.
CHANGE	-12.	-113.	-125.
%	99.	94.	97.
CORREL.			
COEFF.	0.995	0.988	0.984
%RMS	9.29	27.16	15.02
r^2	0.991	0.975	0.969
GEH	0.3	2.6	1.9

GEH	<5	<7	<10	<12	>12
#	9	12	12	12	0
%	75.0	100.0	100.0	100.0	0.0

Cordon Number : 8
 Description : *7 ACT Boundary Inbound first

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
7329	8028	538.	638	100.	118.6	4.1	825.	706	-119.	85.6	4.3	1363.	1344	-19.	98.6	*YASS Rd.- ACT border - Rail bridge (ZC245)
9230	3609	106.	186	80.	175.5	6.6	333.	430	97.	129.1	5.0	439.	616	177.	140.3	*MCEWAN Ave nth of HENDERSON St
3021	2731	490.	527	37.	107.6	1.6	950.	933	-17.	98.2	0.6	1440.	1460	20.	101.4	*URIARA Rd.- Rail Bridge - Kendall Ave.Nth (ZC247)
2990	2296	591.	636	45.	107.6	1.8	No Back Link Present .				591.	636	45.	107.6	*Canberra Dr. North of KENDALL Ave EB (ZC248) 08	
2741	2295	No Forward Link Present .					1878.	1898	20.	101.1	0.5	1878.	1898	20.	101.1	*Canberra Dr. North of KENDALL Ave WB (ZC248) 08
5173	2770	950.	962	12.	101.3	0.4	1365.	1329	-36.	97.4	1.0	2315.	2291	-24.	99.0	*LANYON Dr.- ACT Border - Tomsitt Dr./ To QBN (ZC249)
4452	3313	32.	35	3.	109.4	0.5	100.	150	50.	150.0	4.5	132.	185	53.	140.2	*OLD COOMA Rd.- Sth. of Thoroughbread Dr. (ZC250)

Number of links = 7 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
COUNT	2707.	5451.	8158.
VOLUME	2984.	5446.	8430.
CHANGE	277.	-5.	272.
%	110.	100.	103.
CORREL.			
COEFF.	0.994	0.994	0.998
%RMS	14.00	8.25	6.82
r^2	0.987	0.988	0.996
GEH	5.2	0.1	3.0

GEH <5 <7 <10 <12 >12
 # 11 12 12 12 0
 % 91.7 100.0 100.0 100.0 0.0

Cordon Number : 9
 Description : *8 Spot counts

		FORWARD					BACK					TOTAL				
NODE1	NODE2	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	
2218	2248	81.	62	-19.	76.5	2.2	69.	55	-14.	79.7	1.8	150.	117	-33.	78.0	*Lorn St btw Morton St and Kendall Ave Nth
4060	2926	68.	57	-11.	83.8	1.4	115.	116	1.	100.9	0.1	183.	173	-10.	94.5	*Morton St Btw Richard Ave-Frederick St
3362	4067	71.	39	-32.	54.9	4.3	122.	83	-39.	68.0	3.9	193.	122	-71.	63.2	*STORNAWAY Rd. #77_Surveyor St. - Meredith St.
2402	2673	130.	92	-38.	70.8	3.6	39.	39	0.	100.0	0.0	169.	131	-38.	77.5	*CARWOOLA St nth of DODSWORTH Ave
2403	2402	10.	20	10.	200.0	2.6	4.	11	7.	275.0	2.6	14.	31	17.	221.4	*DODSWORTH Ave wst of SEVERNE St
4001	4356	153.	220	67.	143.8	4.9	58.	123	65.	212.1	6.8	211.	343	132.	162.6	*CAMERON Rd north of ALANBAR St 06
2650	2651	83.	72	-11.	86.7	1.2	321.	315	-6.	98.1	0.3	404.	387	-17.	95.8	*BARRACKS FLAT Dr Est of COOMA Rd

Number of links = 7 Number of forward links = 7 Number of back links = 7

TOTALS	FORWARD	BACK	TOTALS
COUNT	596.	728.	1324.
VOLUME	562.	742.	1304.
CHANGE	-34.	14.	-20.
%	94.	102.	98.
CORREL.			
COEFF.	0.858	0.953	0.864
%RMS	41.97	30.48	34.59
r^2	0.735	0.908	0.747
GEH	1.4	0.5	0.6

GEH <5 <7 <10 <12 >12
 # 13 14 14 14 0
 % 92.9 100.0 100.0 100.0 0.0

Cordon Number : 10
 Description : *9 ALL

		FORWARD					BACK					TOTAL				
NODE1	NODE2	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	
2300	2249	199.	220	21.	110.6	1.5	147.	163	16.	110.9	1.3	346.	383	37.	110.7	*KENDALL Ave. Nth.- Canberra Ave. - Stephens Rd.
2079	4373	163.	88	-75.	54.0	6.7	52.	47	-5.	90.4	0.7	215.	135	-80.	62.8	*STEPHENS Rd.- Canberra Ave. - Kendall Ave. Nth.
4369	2153	72.	66	-6.	91.7	0.7	61.	42	-19.	68.9	2.6	133.	108	-25.	81.2	*MUNRO Rd.- #32_Spendelove St. - Ross Rd.
4049	4050	258.	238	-20.	92.2	1.3	155.	191	36.	123.2	2.7	413.	429	16.	103.9	*ROSS Rd.- #106_Munro Rd. - Early St.
2194	2378	124.	144	20.	116.1	1.7	89.	69	-20.	77.5	2.3	213.	213	0.	100.0	*STORNAWAY Rd.- #121_Canberra Ave. - Early St.
3834	3244	53.	49	-4.	92.5	0.6	35.	32	-3.	91.4	0.5	88.	81	-7.	92.0	*CAMPBELL St.- Canberra Ave. - George St
3306	3513	394.	461	67.	117.0	3.2	No Back Link Present .					394.	461	67.	117.0	*LOWE St.- Farrer Pl. - Morisset St NB 05
3306	2215	No Forward Link Present .					272.	295	23.	108.5	1.4	272.	295	23.	108.5	*LOWE St.- Farrer Pl. - Morisset St SB 05
4435	3514	241.	191	-50.	79.3	3.4	No Back Link Present .					241.	191	-50.	79.3	*CRAWFORD ST nth of MONARO St NB
4436	2761	No Forward Link Present .					223.	311	88.	139.5	5.4	223.	311	88.	139.5	*CRAWFORD ST nth of MONARO St SB
2591	4446	327.	371	44.	113.5	2.4	201.	194	-7.	96.5	0.5	528.	565	37.	107.0	*COLLETT St sth of MORISSET St
3905	3888	21.	58	37.	276.2	5.9	58.	67	9.	115.5	1.1	79.	125	46.	158.2	*KEALMAN Rd.- Gilmore Rd. - Gregory St.
3888	3889	48.	12	-36.	25.0	6.6	57.	68	11.	119.3	1.4	105.	80	-25.	76.2	*GREGORY St.- #4_Kealman Rd. - John Bull St.
4125	3250	1419.	1400	-19.	98.7	0.5	No Back Link Present .					1419.	1400	-19.	98.7	*LANYON Dr.Gilmore Rd. - Canberra Ave NB
4124	2091	No Forward Link Present .					589.	686	97.	116.5	3.8	589.	686	97.	116.5	*LANYON Dr.Gilmore Rd. - Canberra Ave SB
2921	3234	408.	496	88.	121.6	4.1	118.	108	-10.	91.5	0.9	526.	604	78.	114.8	*THARWA Rd.- Gilmore Pl. - Ross Rd.#58&59
2357	3234	270.	247	-23.	91.5	1.4	123.	36	-87.	29.3	9.8	393.	283	-110.	72.0	*ROSS Rd.- #132_Fergus Rd. - Tharwa Rd.

2871	4352	20.	54	34.	270.0	5.6	16.	19	3.	118.8	0.7	36.	73	37.	202.8	*McINTOSH St.- at # 27 - NTH/ STH 04 scaled		
2388	2739	212.	166	-46.	78.3	3.3	141.	123	-18.	87.2	1.6	353.	289	-64.	81.9	*DONALD Rd.- #14_Garland Ave. - Canberra Ave		
2537	2536	189.	293	104.	155.0	6.7	123.	190	67.	154.5	5.4	312.	483	171.	154.8	*CAMERON Rd.- #15_Glebe Ave. - Canberra Ave.		
3253	3371	469.	462	-7.	98.5	0.3	248.	218	-30.	87.9	2.0	717.	680	-37.	94.8	*LOWE St. - Opp. School/ Cooma/Monaro St. - Monaro St./Rutlidge St.		
4442	2472	290.	313	23.	107.9	1.3	130.	138	8.	106.2	0.7	420.	451	31.	107.4	*COLLETT St.- #25 Car park - Leagues Club Lane		
2596	3984	422.	448	26.	106.2	1.2	No Back Link Present .				422.	448	26.	106.2	*ATKINSON St.- #19n_Macquoid St. - Bungendore Rd.			
2596	3980	No Forward Link Present .				286.	367	81.	128.3	4.5	286.	367	81.	128.3	*ATKINSON St.- #19s_Bungendore Rd. - Macquoid St.			
4411	2374	186.	211	25.	113.4	1.8	69.	35	-34.	50.7	4.7	255.	246	-9.	96.5	*ELLERTON Dr.- QCC depot - Bungendore Rd.		
3351	3350	56.	87	31.	155.4	3.7	58.	44	-14.	75.9	2.0	114.	131	17.	114.9	*WARROO St sth of BUNGENDORE ST		
3350	4450	791.	727	-64.	91.9	2.3	609.	677	68.	111.2	2.7	1400.	1404	4.	100.3	*Bungendore St est of Warrooo St (2009 scaled)		
3407	2093	1018.	1043	25.	102.5	0.8	No Back Link Present .				1018.	1043	25.	102.5	*LANYON Dr - Tomsitt Dr- Hoover Rd NB			
3409	4148	No Forward Link Present .				570.	565	-5.	99.1	0.2	570.	565	-5.	99.1	*LANYON Dr - Tomsitt Dr - Hoover Rd SB			
3005	4238	319.	344	25.	107.8	1.4	83.	96	13.	115.7	1.4	402.	440	38.	109.5	*COOMA Rd.- Candlebark Rd. - Wickerslack 07		
4211	3973	1226.	1193	-33.	97.3	0.9	No Back Link Present .				1226.	1193	-33.	97.3	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane WST NB			
4210	3224	No Forward Link Present .				347.	347	0.	100.0	0.0	347.	347	0.	100.0	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane EST SB			
2316	2319	270.	257	-13.	95.2	0.8	116.	86	-30.	74.1	3.0	386.	343	-43.	88.9	*HALLORAN Dr.- #44_Jerrabomberra Hill Rd. - Tully Pl.		
2772	2771	441.	481	40.	109.1	1.9	641.	527	-114.	82.2	4.7	1082.	1008	-74.	93.2	*URIARA Rd.- #51_Railway Ave. - Blackall Ave./ EST bound		
NOTE		3740	2771	44.	51	7.	115.9	1.0	22.	8	-14.	36.4	3.6	66.	59	-7.	89.4	*BLACKALL Ave.- #8_Morton St. - Uriara Rd.
NOTE		2156	3114	125.	95	-30.	76.0	2.9	108.	61	-47.	56.5	5.1	233.	156	-77.	67.0	*Morton Street - btw Agnes Ave. and Ross Road
		2718	3230	91.	68	-23.	74.7	2.6	94.	52	-42.	55.3	4.9	185.	120	-65.	64.9	*Surveyor Street - btw Agnes Ave. and Ross Road
		2381	2380	68.	118	50.	173.5	5.2	78.	131	53.	167.9	5.2	146.	249	103.	170.5	*EARLY St. #20_Agnes Ave - Ross Rd
NOTE		3283	2195	938.	886	-52.	94.5	1.7	No Back Link Present .				938.	886	-52.	94.5	*CANNBERRA Ave.Tharwa Rd. - Lanyon Dr./ KERB&Middle Lane EB 2004	
		2987	2191	No Forward Link Present .				1364.	1361	-3.	99.8	0.1	1364.	1361	-3.	99.8	*CANNBERRA Ave.Lanyon Dr. - Ross Rd.KERB&Middle Lane WB 2007	
		2446	2445	35.	57	22.	162.9	3.2	19.	36	17.	189.5	3.2	54.	93	39.	172.2	*CREST PARK Pde.- #20_Weir Pl. - Telopea Cresc. 07
		4390	4004	180.	127	-53.	70.6	4.3	79.	129	50.	163.3	4.9	259.	256	-3.	98.8	*COLLETT St.- #119_Erin St. - Campbell St.
		2365	2362	126.	140	14.	111.1	1.2	92.	76	-16.	82.6	1.7	218.	216	-2.	99.1	*ERIN St.- #1_Crawford St. - Collett St.
		2997	2995	590.	578	-12.	98.0	0.5	535.	547	12.	102.2	0.5	1125.	1125	0.	100.0	*CRAWFORD St.- Campbell St-Killard St.
		2981	4291	66.	119	53.	180.3	5.5	24.	64	40.	266.7	6.0	90.	183	93.	203.3	*ANTILL St.- #11_Campbell St. - Crawford St.
		3126	3511	No Forward Link Present .				311.	300	-11.	96.5	0.6	311.	300	-11.	96.5	*LOWE St. - Morisset St. - Campbell St./ NTH bound. 05	
		4307	3127	281.	268	-13.	95.4	0.8	No Back Link Present .				281.	268	-13.	95.4	*LOWE St. - Morisset St. - Campbell St./ STH bound. 05	
		4311	3290	1018.	1017	-1.	99.9	0.0	No Back Link Present .				1018.	1017	-1.	99.9	*FARRER Pl. -Campbell St. - Lowe St EB	
		4317	3183	No Forward Link Present .				934.	746	-188.	79.9	6.5	934.	746	-188.	79.9	*FARRER Pl. -Campbell St. - Lowe St WB	
		7329	8028	538.	638	100.	118.6	4.1	825.	706	-119.	85.6	4.3	1363.	1344	-19.	98.6	*YASS Rd.- ACT border - Rail bridge (ZC245)
		9230	3609	106.	186	80.	175.5	6.6	333.	430	97.	129.1	5.0	439.	616	177.	140.3	*MCEWAN Ave nth of HENDERSON St
		3021	2731	490.	527	37.	107.6	1.6	950.	933	-17.	98.2	0.6	1440.	1460	20.	101.4	*URIARA Rd.- Rail Bridge - Kendall Ave.Nth (ZC247)
		2990	2296	591.	636	45.	107.6	1.8	No Back Link Present .				591.	636	45.	107.6	*Canberra Dr. North of KENDALL Ave EB (ZC248) 08	
		2741	2295	No Forward Link Present .				1878.	1898	20.	101.1	0.5	1878.	1898	20.	101.1	*Canberra Dr. North of KENDALL Ave WB (ZC248) 08	
		5173	2770	950.	962	12.	101.3	0.4	1365.	1329	-36.	97.4	1.0	2315.	2291	-24.	99.0	*LANYON Dr.- ACT Border - Tomsitt Dr./ To QBN (ZC249)
		4452	3313	32.	35	3.	109.4	0.5	100.	150	50.	150.0	4.5	132.	185	53.	140.2	*OLD COOMA Rd.- Sth. of Thoroughbread Dr. (ZC250)
		2218	2248	81.	62	-19.	76.5	2.2	69.	55	-14.	79.7	1.8	150.	117	-33.	78.0	*Lorn St btw Morton St and Kendall Ave Nth
		4060	2926	68.	57	-11.	83.8	1.4	115.	116	1.	100.9	0.1	183.	173	-10.	94.5	*Morton St Btw Richard Ave-Frederick St
		3362	4067	71.	39	-32.	54.9	4.3	122.	83	-39.	68.0	3.9	193.	122	-71.	63.2	*STORNAWAY Rd. #77_Surveyor St. - Meredith St.
		2402	2673	130.	92	-38.	70.8	3.6	39.	39	0.	100.0	0.0	169.	131	-38.	77.5	*CARWOOLA St nth of DODSWORTH Ave
		2403	2402	10.	20	10.	200.0	2.6	4.	11	7.	275.0	2.6	14.	31	17.	221.4	*DODSWORTH Ave wst of SEVERNE St
		4001	4356	153.	220	67.	143.8	4.9	58.	123	65.	212.1	6.8	211.	343	132.	162.6	*CAMERON Rd north of ALANBAR St 06
		2650	2651	83.	72	-11.	86.7	1.2	321.	315	-6.	98.1	0.3	404.	387	-17.	95.8	*BARRACKS FLAT Dr Est of COOMA Rd

Number of links = 63 Number of forward links = 53 Number of back links = 53

TOTALS	FORWARD	BACK	TOTALS
COUNT	16771.	15456.	32227.
VOLUME	17190.	15440.	32630.
CHANGE	419.	-16.	403.
%	102.	100.	101.
CORREL.			

COEFF. 0.992 0.991 0.992
 %RMS 13.38 17.90 12.27
 r^2 0.985 0.982 0.984
 GEH 3.2 0.1 2.2

GEH <5 <7 <10 <12 >12
 # 90 105 106 106 0
 % 84.9 99.1 100.0 100.0 0.0

Cordon Number : 11
 Description : *10 Canberra - Belconnen Cordon

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
7512	8056	550.	684	134.	124.4	5.4	500.	718	218.	143.6	8.8	1050.	1402	352.	133.5	*Kuringa Dr Barton-Owen Dixon 07
7615	7653	600.	778	178.	129.7	6.8	1400.	1032	-368.	73.7	10.6	2000.	1810	-190.	90.5	*William Slim Dr Barton-Chuculba 07
8823	8822	1000.	891	-109.	89.1	3.5	250.	433	183.	173.2	9.9	1250.	1324	74.	105.9	*Ellenborough Street 07
7599	9163	1100.	677	-423.	61.5	14.2	No Back Link Present .				1100.	677	-423.	61.5	*Belconnen Way EB 11	
7169	9165	No Forward Link Present .					550.	393	-157.	71.5	7.2	550.	393	-157.	71.5	*Belconnen Way WB 11

Number of links = 5 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS
COUNT	3250.	2700.	5950.
VOLUME	3030.	2576.	5606.
CHANGE	-220.	-124.	-344.
%	93.	95.	94.

CORREL.
 COEFF. 0.201 0.874 0.861
 %RMS 34.84 42.00 25.53
 r^2 0.041 0.765 0.741
 GEH 3.9 2.4 4.5

GEH <5 <7 <10 <12 >12
 # 1 3 6 7 1
 % 12.5 37.5 75.0 87.5 12.5

Cordon Number : 12
 Description : *11 Canberra - Lake Burley Griffin

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
9038	9259	2017.	1731	-286.	85.8	6.6	No Back Link Present .				2017.	1731	-286.	85.8	*Monaro Highway NB	
7315	7444	No Forward Link Present .					1438.	1733	295.	120.5	7.4	1438.	1733	295.	120.5	*Monaro Highway SB
7262	9005	1612.	1520	-92.	94.3	2.3	No Back Link Present .				1612.	1520	-92.	94.3	*Kings Ave EB	
7263	7417	No Forward Link Present .					1200.	1219	19.	101.6	0.5	1200.	1219	19.	101.6	*Kings Ave WB
7761	6873	3008.	3013	5.	100.2	0.1	No Back Link Present .				3008.	3013	5.	100.2	*Commonwealth Ave NB	
7174	6887	No Forward Link Present .					3283.	3515	232.	107.1	4.0	3283.	3515	232.	107.1	*Commonwealth Ave SB
7307	9156	283.	391	108.	138.2	5.9	580.	648	68.	111.7	2.7	863.	1039	176.	120.4	*Lady Denman Drive NB
7485	8701	2700.	2925	225.	108.3	4.2	No Back Link Present .				2700.	2925	225.	108.3	*Tuggeranong Parkway NB 10	
9111	7477	No Forward Link Present .					1650.	1197	-453.	72.5	12.0	1650.	1197	-453.	72.5	*Tuggeranong Parkway SB 10
7731	4864	213.	72	-141.	33.8	11.8	150.	246	96.	164.0	6.8	363.	318	-45.	87.6	*Coppins Crossing

Number of links = 10 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
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COUNT	9833.	8301.	18134.
VOLUME	9652.	8558.	18210.
CHANGE	-181.	257.	76.
%	98.	103.	100.
CORREL.			
COEFF.	0.989	0.973	0.972
%RMS	11.33	19.40	13.26
r^2	0.979	0.947	0.945
GEH	1.8	2.8	0.6

GEH	<5	<7	<10	<12	>12
#	6	9	10	11	1
%	50.0	75.0	83.3	91.7	8.3

Cordon Number : 13
Description : *12 Canberra - Outer East Canberra

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
9306	7170	2290.	2370	80.	103.5	1.7	No Back Link Present .				2290.	2370	80.	103.5	*Hindmarsh EB 06	
6686	7091	No Forward Link Present .					1100.	1067	-33.	97.0	1.0	1100.	1067	-33.	97.0	*Hindmarsh WB 11
9325	7942	1200.	1221	21.	101.8	0.6	No Back Link Present .				1200.	1221	21.	101.8	*Moreshead Drive EB	
7941	7940	No Forward Link Present .					1400.	1502	102.	107.3	2.7	1400.	1502	102.	107.3	*Moreshead Drive WB
6905	10283	1550.	1389	-161.	89.6	4.2	900.	997	97.	110.8	3.1	2450.	2386	-64.	97.4	*Fairbairn Ave
7205	8787	300.	365	65.	121.7	3.6	No Back Link Present .				300.	365	65.	121.7	*Federal Highway EB	
7186	7818	No Forward Link Present .					750.	738	-12.	98.4	0.4	750.	738	-12.	98.4	*Federal Highway WB

Number of links = 7 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS
COUNT	5340.	4150.	9490.
VOLUME	5345.	4304.	9649.
CHANGE	5.	154.	159.
%	100.	104.	102.
CORREL.			
COEFF.	0.991	0.979	0.997
%RMS	8.32	8.07	4.93
r^2	0.982	0.959	0.994
GEH	0.1	2.4	1.6

GEH	<5	<7	<10	<12	>12
#	8	8	8	8	0
%	100.0	100.0	100.0	100.0	0.0

Cordon Number : 14
Description : *13 Canberra - Tuggeranong Cordon

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
6834	5463	500.	445	-55.	89.0	2.5	450.	263	-187.	58.4	9.9	950.	708	-242.	74.5	*Namatjira Drive 06
5058	5354	3450.	2634	-816.	76.3	14.8	No Back Link Present .				3450.	2634	-816.	76.3	*Tuggeranong Parkway NB 06	
5458	5067	No Forward Link Present .					850.	668	-182.	78.6	6.6	850.	668	-182.	78.6	*Tuggeranong Parkway SB 06
5501	5740	2300.	2265	-35.	98.5	0.7	No Back Link Present .				2300.	2265	-35.	98.5	*Erindale Drive NB 07	
5734	5739	No Forward Link Present .					550.	478	-72.	86.9	3.2	550.	478	-72.	86.9	*Erindale Drive SB 07
5015	6413	500.	608	108.	121.6	4.6	200.	201	1.	100.5	0.1	700.	809	109.	115.6	*Mugga Road 07
5135	5618	3550.	3273	-277.	92.2	4.7	No Back Link Present .				3550.	3273	-277.	92.2	*Monaro Highway NB 07	
5293	5116	No Forward Link Present .					700.	696	-4.	99.4	0.2	700.	696	-4.	99.4	*Monaro Highway SB 07

6398 6650 1950. 2733 783. 140.2 16.2 No Back Link Present . 1950. 2733 783. 140.2 *Canberra Ave NB 07
 6399 6649 No Forward Link Present . 850. 1175 325. 138.2 10.2 850. 1175 325. 138.2 *Canberra Ave SB 07

Number of links = 10 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS		
COUNT	12250.	3600.	15850.		
VOLUME	11958.	3481.	15439.		
CHANGE	-292.	-119.	-411.		
%	98.	97.	97.		
CORREL.					
COEFF.	0.923	0.861	0.934		
%RMS	25.65	31.53	26.36		
r^2	0.853	0.742	0.872		
GEH	2.7	2.0	3.3		
GEH <5 <7 <10 <12 >12					
#	7	8	9	10	2
%	58.3	66.7	75.0	83.3	16.7

Cordon Number : 15
 Description : *14 Spot counts

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
7239	7241	1300.	993	-307.	76.4	9.1	300.	348	48.	116.0	2.7	1600.	1341	-259.	83.8	*Aikman
5225	5080	450.	438	-12.	97.3	0.6	1450.	1649	199.	113.7	5.1	1900.	2087	187.	109.8	*Ashley
8946	9238	1300.	1415	115.	108.8	3.1	No Back Link Present .				1300.	1415	115.	108.8	*Barton	
7695	9239	No Forward Link Present .					550.	351	-199.	63.8	9.4	550.	351	-199.	63.8	*Barton
8223	8180	700.	756	56.	108.0	2.1	150.	182	32.	121.3	2.5	850.	938	88.	110.4	*Ginninderra
6556	7909	2050.	2238	188.	109.2	4.1	No Back Link Present .				2050.	2238	188.	109.2	*Gungalin	
6555	7911	No Forward Link Present .					850.	856	6.	100.7	0.2	850.	856	6.	100.7	*Gungalin
10098	10086	600.	714	114.	119.0	4.4	No Back Link Present .				600.	714	114.	119.0	*National Circus	
10099	10087	No Forward Link Present .					400.	341	-59.	85.2	3.1	400.	341	-59.	85.2	*N C
9362	8487	800.	728	-72.	91.0	2.6	No Back Link Present .				800.	728	-72.	91.0	*Southern Cross	
7301	8501	No Forward Link Present .					250.	177	-73.	70.8	5.0	250.	177	-73.	70.8	*Southern Cross
9806	8830	500.	521	21.	104.2	0.9	No Back Link Present .				500.	521	21.	104.2	*Wentworth	
7982	8829	No Forward Link Present .					1300.	1304	4.	100.3	0.1	1300.	1304	4.	100.3	*Wentworth

Number of links = 13 Number of forward links = 8 Number of back links = 8

TOTALS	FORWARD	BACK	TOTALS		
COUNT	7700.	5250.	12950.		
VOLUME	7803.	5208.	13011.		
CHANGE	103.	-42.	61.		
%	101.	99.	100.		
CORREL.					
COEFF.	0.967	0.984	0.981		
%RMS	15.94	17.41	13.76		
r^2	0.935	0.968	0.962		
GEH	1.2	0.6	0.5		
GEH <5 <7 <10 <12 >12					
#	13	14	16	16	0
%	81.2	87.5	100.0	100.0	0.0

CORDON terminated successfully

EVENING PEAK

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+-----+
| TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS TR |
| TRACKS +-----+ TRACKS |
| S TRACKS| |S TRACKS |
| KS TRACK| Program : CORDON |KS TRACK |
| CKS TRAC| Version : V7.08 |CKS TRAC |
| ACKS TRA| |ACKS TRA |
| RACKS TR| Date run : 30-JAN-13 |RACKS TR |
| TRACKS T| Time run : 10:01:46 |TRACKS T |
| TRACKS | Platform : Win 95/NT | TRACKS |
| S TRACKS+-----+S TRACKS |
| KS TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS |
+-----+
| TRACKS Licenced to |
| Gabites Porter |
| at : Christchurch, N.Z. |
+-----+
Build Date : 11/12/12 07:32
Parameter version : V7.00
    
```

Network Period Factor : 1.000

Cordon Period Factor : 1.000

GEH Period Factor : 1.000

CSV Output File :

Cordon Data File : QE11CD.ALL*QUEANBEYAN MODEL
 Loaded Network : QE11NL.000 *QUEANBEYAN PMP 2011 ALL
 16400 Links in network

Cordon Number : 1
 Description : *1

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2300	2249	179.	212	33.	118.4	2.4	296.	228	-68.	77.0	4.2	475.	440	-35.	92.6	*KENDALL Ave. Nth.- Canberra Ave. - Stephens Rd.
2079	4373	54.	36	-18.	66.7	2.7	99.	75	-24.	75.8	2.6	153.	111	-42.	72.5	*STEPHENS Rd.- Canberra Ave. - Kendall Ave. Nth.
4369	2153	93.	68	-25.	73.1	2.8	93.	84	-9.	90.3	1.0	186.	152	-34.	81.7	*MUNRO Rd.- #32_Spendelove St. - Ross Rd.
4049	4050	187.	223	36.	119.3	2.5	226.	260	34.	115.0	2.2	413.	483	70.	116.9	*ROSS Rd.- #106_Munro Rd. - Early St.
2194	2378	108.	141	33.	130.6	3.0	160.	142	-18.	88.8	1.5	268.	283	15.	105.6	*STORNAWAY Rd.- #121_Canberra Ave. - Early St.
3834	3244	30.	34	4.	113.3	0.7	48.	40	-8.	83.3	1.2	78.	74	-4.	94.9	*CAMPBELL St.- Canberra Ave. - George St

3306	3513	266.	348	82.	130.8	4.7	No Back Link Present .	266.	348	82.	130.8	*LOWE St.- Farrer Pl. - Morisset St NB 05
3306	2215	No Forward Link Present .					510.	666	156.	130.6	6.4	*LOWE St.- Farrer Pl. - Morisset St SB 05
4435	3514	237.	244	7.	103.0	0.5	No Back Link Present .	237.	244	7.	103.0	*CRAWFORD ST nth of MONARO St NB
4436	2761	No Forward Link Present .					459.	454	-5.	98.9	0.2	*CRAWFORD ST nth of MONARO St SB
4437	2949	394.	361	-33.	91.6	1.7	381.	362	-19.	95.0	1.0	*COLLETT St sth of MORISSET St

Number of links = 11 Number of forward links = 9 Number of back links = 9

TOTALS	FORWARD	BACK	TOTALS		
COUNT	1548.	2272.	3820.		
VOLUME	1667.	2311.	3978.		
CHANGE	119.	39.	158.		
%	108.	102.	104.		
CORREL.					
COEFF.	0.956	0.964	0.955		
%RMS	22.80	24.88	18.91		
r^2	0.914	0.930	0.912		
GEH	3.0	0.8	2.5		
GEH <5	<7	<10	<12	>12	
#	17	18	18	18	0
%	94.4	100.0	100.0	100.0	0.0

Cordon Number : 2
Description : *2a

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
3905	3888	12.	22	10.	183.3	2.4	74.	28	-46.	37.8	6.4	86.	50	-36.	58.1	*KEALMAN Rd.- Gilmore Rd. - Gregory St.
3888	3889	54.	65	11.	120.4	1.4	44.	31	-13.	70.5	2.1	98.	96	-2.	98.0	*GREGORY St.- #4_Kealman Rd. - John Bull St.
4125	3250	714.	734	20.	102.8	0.7	No Back Link Present .				714.	734	20.	102.8	*LANYON Dr.Gilmore Rd. - Canberra Ave NB	
4124	2091	No Forward Link Present .					1483.	1432	-51.	96.6	1.3	1483.	1432	-51.	96.6	*LANYON Dr.Gilmore Rd. - Canberra Ave SB
2921	3234	206.	217	11.	105.3	0.8	365.	341	-24.	93.4	1.3	571.	558	-13.	97.7	*THARWA Rd.- Gilmore Pl. - Ross Rd.#58&59
2357	3234	72.	97	25.	134.7	2.7	130.	128	-2.	98.5	0.2	202.	225	23.	111.4	*ROSS Rd.- #132_Fergus Rd. - Tharwa Rd.
2871	4352	17.	45	28.	264.7	5.0	20.	51	31.	255.0	5.2	37.	96	59.	259.5	*McINTOSH St.- at # 27 - NTH/ STH 04 scaled
2388	2739	128.	97	-31.	75.8	2.9	269.	428	159.	159.1	8.5	397.	525	128.	132.2	*DONALD Rd.- #14_Garland Ave. - Canberra Ave
2537	2536	106.	168	62.	158.5	5.3	221.	185	-36.	83.7	2.5	327.	353	26.	108.0	*CAMERON Rd.- #15_Glebe Ave. - Canberra Ave.
3253	3371	366.	377	11.	103.0	0.6	546.	683	137.	125.1	5.5	912.	1060	148.	116.2	*LOWE St. - Opp. School/ Cooma/Monaro St. - Monaro St./Rutlidge St.
4442	2472	265.	275	10.	103.8	0.6	314.	269	-45.	85.7	2.6	579.	544	-35.	94.0	*COLLETT St.- #25 Car park - Leagues Club Lane

Number of links = 11 Number of forward links = 10 Number of back links = 10

TOTALS	FORWARD	BACK	TOTALS		
COUNT	1940.	3466.	5406.		
VOLUME	2097.	3576.	5673.		
CHANGE	157.	110.	267.		
%	108.	103.	105.		
CORREL.					
COEFF.	0.994	0.984	0.989		
%RMS	14.56	22.31	14.20		
r^2	0.989	0.969	0.978		
GEH	3.5	1.9	3.6		
GEH <5	<7	<10	<12	>12	
#	14	19	20	20	0
%	70.0	95.0	100.0	100.0	0.0

Cordon Number : 3
Description : *2b

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2596	3984	459.	479	20.	104.4	0.9	No Back Link Present .				459.	479	20.	104.4	*ATKINSON St.- #19n_Macquoid St. - Bungendore Rd.	
2596	3980	No Forward Link Present .					537.	645	108.	120.1	4.4	537.	645	108.	120.1	*ATKINSON St.- #19s_Bungendore Rd. - Macquoid St.
4411	2374	127.	98	-29.	77.2	2.7	225.	138	-87.	61.3	6.5	352.	236	-116.	67.0	*ELLERTON Dr.- QCC depot - Bungendore Rd.
3351	3350	49.	79	30.	161.2	3.8	103.	109	6.	105.8	0.6	152.	188	36.	123.7	*WARROO St sth of BUNGENDORE ST
3350	4450	610.	619	9.	101.5	0.4	864.	884	20.	102.3	0.7	1474.	1503	29.	102.0	*Bungendore St est of Warrooo St

Number of links = 5 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS		
COUNT	1245.	1729.	2974.		
VOLUME	1275.	1776.	3051.		
CHANGE	30.	47.	77.		
%	102.	103.	103.		
CORREL.					
COEFF.	0.996	0.982	0.989		
%RMS	8.74	18.73	13.98		
r^2	0.991	0.965	0.977		
GEH	0.8	1.1	1.4		
GEH	<5	<7	<10	<12	>12
#	7	8	8	8	0
%	87.5	100.0	100.0	100.0	0.0

Cordon Number : 4
Description : *3

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
3407	2093	598.	540	-58.	90.3	2.4	No Back Link Present .				598.	540	-58.	90.3	*LANYON Dr - Tomsitt Dr- Hoover Rd NB	
3409	4148	No Forward Link Present .					1021.	1008	-13.	98.7	0.4	1021.	1008	-13.	98.7	*LANYON Dr - Tomsitt Dr - Hoover Rd SB
2316	2319	212.	209	-3.	98.6	0.2	294.	268	-26.	91.2	1.6	506.	477	-29.	94.3	*HALLORAN Dr.- #44_Jerrabomberra Hill Rd. - Tully Pl.
3005	4238	115.	149	34.	129.6	3.0	287.	409	122.	142.5	6.5	402.	558	156.	138.8	*COOMA Rd.- Candlebark Rd. - Wickerslack 07

Number of links = 4 Number of forward links = 3 Number of back links = 3

TOTALS	FORWARD	BACK	TOTALS		
COUNT	925.	1602.	2527.		
VOLUME	898.	1685.	2583.		
CHANGE	-27.	83.	56.		
%	97.	105.	102.		
CORREL.					
COEFF.	0.999	0.982	0.935		
%RMS	15.43	16.61	15.48		
r^2	0.998	0.965	0.875		
GEH	0.9	2.0	1.1		
GEH	<5	<7	<10	<12	>12
#	5	6	6	6	0
%	83.3	100.0	100.0	100.0	0.0

Cordon Number : 5
Description : *4

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
4211	3973	504.	573	69.	113.7	3.0	No Back Link Present .				504.	573	69.	113.7	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane WST NB	
4210	3224	No Forward Link Present .					1375.	1282	-93.	93.2	2.6	1375.	1282	-93.	93.2	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane EST SB

Number of links = 2 Number of forward links = 1 Number of back links = 1

TOTALS	FORWARD	BACK	TOTALS
COUNT	504.	1375.	1879.
VOLUME	573.	1282.	1855.
CHANGE	69.	-93.	-24.
%	114.	93.	99.
CORREL.			
COEFF.	0.000	0.000	1.000
%RMS	0.00	0.00	12.33
r^2	0.000	0.000	1.000
GEH	3.0	2.6	0.6

GEH	<5	<7	<10	<12	>12
#	2	2	2	2	0
%	100.0	100.0	100.0	100.0	0.0

Cordon Number : 6
Description : *5

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL					
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		
2772	2771	682.	731	49.	107.2	1.8	407.	448	41.	110.1	2.0	1089.	1179	90.	108.3	*URIARA Rd.- #51_Railway Ave. - Blackall Ave./ EST bound	
NOTE	3740	2771	32.	43	11.	134.4	1.8	58.	66	8.	113.8	1.0	90.	109	19.	121.1	*BLACKALL Ave.- #8_Morton St. - Uriara Rd.
NOTE	2156	3114	109.	102	-7.	93.6	0.7	113.	111	-2.	98.2	0.2	222.	213	-9.	95.9	*Morton Street - btw Agnes Ave. and Ross Road
	2718	3230	35.	52	17.	148.6	2.6	50.	47	-3.	94.0	0.4	85.	99	14.	116.5	*Surveyor Street - btw Agnes Ave. and Ross Road
	2381	2380	37.	65	28.	175.7	3.9	62.	79	17.	127.4	2.0	99.	144	45.	145.5	*EARLY St. #20_Agnes Ave - Ross Rd
NOTE	3283	2195	1364.	1297	-67.	95.1	1.8	No Back Link Present .				1364.	1297	-67.	95.1	*CANBERRA Ave.Tharwa Rd. - Lanyon Dr./ KERB&Middle Lane EB 2004	
	2987	2191	No Forward Link Present .					1226.	1214	-12.	99.0	0.3	1226.	1214	-12.	99.0	*CANBERRA Ave.Lanyon Dr. - Ross Rd.KERB&Middle Lane WB 2007
	2446	2445	39.	51	12.	130.8	1.8	48.	93	45.	193.8	5.4	87.	144	57.	165.5	*CREST PARK Pde.- #20_Weir Pl. - Telopea Cresc. 07

Number of links = 8 Number of forward links = 7 Number of back links = 7

TOTALS	FORWARD	BACK	TOTALS
COUNT	2298.	1964.	4262.
VOLUME	2341.	2058.	4399.
CHANGE	43.	94.	137.
%	102.	105.	103.
CORREL.			
COEFF.	0.998	0.999	0.997
%RMS	11.31	9.45	9.69
r^2	0.997	0.998	0.994
GEH	0.9	2.1	2.1

GEH <5 <7 <10 <12 >12
 # 13 14 14 14 0
 % 92.9 100.0 100.0 100.0 0.0

Cordon Number : 7
 Description : *6

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
4390	4004	185.	137	-48.	74.1	3.8	202.	161	-41.	79.7	3.0	387.	298	-89.	77.0	*COLLETT St.- #119_Erin St. - Campbell St.
2365	2362	174.	154	-20.	88.5	1.6	104.	111	7.	106.7	0.7	278.	265	-13.	95.3	*ERIN St.- #1_Crawford St. - Collett St.
2997	2995	874.	804	-70.	92.0	2.4	529.	550	21.	104.0	0.9	1403.	1354	-49.	96.5	*CRAWFORD St.- Campbell St-Killard St.
2981	4291	55.	80	25.	145.5	3.0	125.	109	-16.	87.2	1.5	180.	189	9.	105.0	*ANTILL St.- #11_Campbell St. - Crawford St.
3126	3511	No Forward Link Present .					332.	307	-25.	92.5	1.4	332.	307	-25.	92.5	*LOWE St. - Morisset St. - Campbell St./ NTH bound. 05
4307	3127	420.	481	61.	114.5	2.9	No Back Link Present .				420.	481	61.	114.5	*LOWE St. - Morisset St. - Campbell St./ STH bound. 05	
4311	3290	905.	756	-149.	83.5	5.2	No Back Link Present .				905.	756	-149.	83.5	*FARRER Pl. -Campbell St. - Lowe St EB	
4317	3183	No Forward Link Present .					1141.	1160	19.	101.7	0.6	1141.	1160	19.	101.7	*FARRER Pl. -Campbell St. - Lowe St WB

Number of links = 8 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
COUNT	2613.	2433.	5046.
VOLUME	2412.	2398.	4810.
CHANGE	-201.	-35.	-236.
%	92.	99.	95.
CORREL.			
COEFF.	0.986	0.999	0.990
%RMS	18.98	6.44	11.60
r^2	0.972	0.997	0.979
GEH	4.0	0.7	3.4

GEH <5 <7 <10 <12 >12
 # 11 12 12 12 0
 % 91.7 100.0 100.0 100.0 0.0

Cordon Number : 8
 Description : *7 ACT Boundary Inbound first

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
7329	8028	792.	702	-90.	88.6	3.3	554.	538	-16.	97.1	0.7	1346.	1240	-106.	92.1	*YASS Rd.- ACT border - Rail bridge (ZC245)
9230	3609	419.	515	96.	122.9	4.4	145.	227	82.	156.6	6.0	564.	742	178.	131.6	*MCEWAN Ave nth of HENDERSON St
3021	2731	940.	1071	131.	113.9	4.1	461.	567	106.	123.0	4.7	1401.	1638	237.	116.9	*URIARA Rd.- Rail Bridge - Kendall Ave.Nth (ZC247)
2990	2296	1757.	1561	-196.	88.8	4.8	No Back Link Present .				1757.	1561	-196.	88.8	*Canberra Dr. North of KENDALL Ave EB (ZC248) 08	
2741	2295	No Forward Link Present .					828.	827	-1.	99.9	0.0	828.	827	-1.	99.9	*Canberra Dr. North of KENDALL Ave WB (ZC248) 08
5173	2770	1406.	1311	-95.	93.2	2.6	969.	1071	102.	110.5	3.2	2375.	2382	7.	100.3	*LANYON Dr.- ACT Border - Tomsitt Dr./ To QBN (ZC249)
4452	3313	98.	148	50.	151.0	4.5	49.	73	24.	149.0	3.1	147.	221	74.	150.3	*OLD COOMA Rd.- Sth. of Thoroughbread Dr. (ZC250)

Number of links = 7 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
COUNT	5412.	3006.	8418.
VOLUME	5308.	3303.	8611.
CHANGE	-104.	297.	193.
%	98.	110.	102.
CORREL.			

COEFF.	0.986	0.989	0.980
%RMS	14.41	15.25	12.84
r^2	0.972	0.979	0.961
GEH	1.4	5.3	2.1

GEH	<5	<7	<10	<12	>12
#	11	12	12	12	0
%	91.7	100.0	100.0	100.0	0.0

Cordon Number : 9
 Description : *8 Spot counts

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2218	2248	57.	57	0.	100.0	0.0	137.	77	-60.	56.2	5.8	194.	134	-60.	69.1	*Lorn St btw Morton St and Kendall Ave Nth
4060	2926	107.	115	8.	107.5	0.8	62.	81	19.	130.6	2.2	169.	196	27.	116.0	*Morton St Btw Richard Ave-Frederick St
3362	4067	137.	108	-29.	78.8	2.6	84.	59	-25.	70.2	3.0	221.	167	-54.	75.6	*STORNAWAY Rd. #77_Surveyor St. - Meredith St.
2402	2673	50.	69	19.	138.0	2.5	122.	108	-14.	88.5	1.3	172.	177	5.	102.9	*CARWOOLA St nth of DODSWORTH Ave
2403	2402	8.	18	10.	225.0	2.8	12.	25	13.	208.3	3.0	20.	43	23.	215.0	*DODSWORTH Ave wst of SEVERNE St
4001	4356	63.	74	11.	117.5	1.3	102.	167	65.	163.7	5.6	165.	241	76.	146.1	*CAMERON Rd north of ALANBAR St 06
2650	2651	336.	389	53.	115.8	2.8	155.	213	58.	137.4	4.3	491.	602	111.	122.6	*BARRACKS FLAT Dr Est of COOMA Rd

Number of links = 7 Number of forward links = 7 Number of back links = 7

TOTALS	FORWARD	BACK	TOTALS
COUNT	758.	674.	1432.
VOLUME	830.	730.	1560.
CHANGE	72.	56.	128.
%	109.	108.	109.
CORREL.			
COEFF.	0.986	0.724	0.948
%RMS	24.71	47.48	32.11
r^2	0.973	0.524	0.900
GEH	2.6	2.1	3.3

GEH	<5	<7	<10	<12	>12
#	12	14	14	14	0
%	85.7	100.0	100.0	100.0	0.0

Cordon Number : 10
 Description : *9 ALL

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
2300	2249	179.	212	33.	118.4	2.4	296.	228	-68.	77.0	4.2	475.	440	-35.	92.6	*KENDALL Ave. Nth.- Canberra Ave. - Stephens Rd.
2079	4373	54.	36	-18.	66.7	2.7	99.	75	-24.	75.8	2.6	153.	111	-42.	72.5	*STEPHENS Rd.- Canberra Ave. - Kendall Ave. Nth.
4369	2153	93.	68	-25.	73.1	2.8	93.	84	-9.	90.3	1.0	186.	152	-34.	81.7	*MUNRO Rd.- #32_Spendelove St. - Ross Rd.
4049	4050	187.	223	36.	119.3	2.5	226.	260	34.	115.0	2.2	413.	483	70.	116.9	*ROSS Rd.- #106_Munro Rd. - Early St.
2194	2378	108.	141	33.	130.6	3.0	160.	142	-18.	88.8	1.5	268.	283	15.	105.6	*STORNAWAY Rd.- #121_Canberra Ave. - Early St.
3834	3244	30.	34	4.	113.3	0.7	48.	40	-8.	83.3	1.2	78.	74	-4.	94.9	*CAMPBELL St.- Canberra Ave. - George St
3306	3513	266.	348	82.	130.8	4.7	No Back Link Present .				266.	348	82.	130.8	*LOWE St.- Farrer Pl. - Morisset St NB 05	
3306	2215	No Forward Link Present .					510.	666	156.	130.6	6.4	510.	666	156.	130.6	*LOWE St.- Farrer Pl. - Morisset St SB 05
4435	3514	237.	244	7.	103.0	0.5	No Back Link Present .				237.	244	7.	103.0	*CRAWFORD ST nth of MONARO St NB	
4436	2761	No Forward Link Present .					459.	454	-5.	98.9	0.2	459.	454	-5.	98.9	*CRAWFORD ST nth of MONARO St SB
4437	2949	394.	361	-33.	91.6	1.7	381.	362	-19.	95.0	1.0	775.	723	-52.	93.3	*COLLETT St sth of MORISSET St
3905	3888	12.	22	10.	183.3	2.4	74.	28	-46.	37.8	6.4	86.	50	-36.	58.1	*KEALMAN Rd.- Gilmore Rd. - Gregory St.
3888	3889	54.	65	11.	120.4	1.4	44.	31	-13.	70.5	2.1	98.	96	-2.	98.0	*GREGORY St.- #4_Kealman Rd. - John Bull St.

4125	3250	714.	734	20.	102.8	0.7	No Back Link Present .	714.	734	20.	102.8	*LANYON Dr.Gilmore Rd. - Canberra Ave NB
4124	2091	No Forward Link Present .					1483.	1432	-51.	96.6	1.3	*LANYON Dr.Gilmore Rd. - Canberra Ave SB
2921	3234	206.	217	11.	105.3	0.8	365.	341	-24.	93.4	1.3	*THARWA Rd.- Gilmore Pl. - Ross Rd.#58&59
2357	3234	72.	97	25.	134.7	2.7	130.	128	-2.	98.5	0.2	*ROSS Rd.- #132_Fergus Rd. - Tharwa Rd.
2871	4352	17.	45	28.	264.7	5.0	20.	51	31.	255.0	5.2	*McINTOSH St.- at # 27 - NTH/ STH 04 scaled
2388	2739	128.	97	-31.	75.8	2.9	269.	428	159.	159.1	8.5	*DONALD Rd.- #14_Garland Ave. - Canberra Ave
2537	2536	106.	168	62.	158.5	5.3	221.	185	-36.	83.7	2.5	*CAMERON Rd.- #15_Glebe Ave. - Canberra Ave.
3253	3371	366.	377	11.	103.0	0.6	546.	683	137.	125.1	5.5	*LOWE St. - Opp. School/ Cooma/Monaro St. - Monaro St./Rutlidge St.
4442	2472	265.	275	10.	103.8	0.6	314.	269	-45.	85.7	2.6	*COLLETT St.- #25 Car park - Leagues Club Lane
2596	3984	459.	479	20.	104.4	0.9	No Back Link Present .	459.	479	20.	104.4	*ATKINSON St.- #19n_Macquoid St. - Bungendore Rd.
2596	3980	No Forward Link Present .					537.	645	108.	120.1	4.4	*ATKINSON St.- #19s_Bungendore Rd. - Macquoid St.
4411	2374	127.	98	-29.	77.2	2.7	225.	138	-87.	61.3	6.5	*ELLERTON Dr.- QCC depot - Bungendore Rd.
3351	3350	49.	79	30.	161.2	3.8	103.	109	6.	105.8	0.6	*WARROO St sth of BUNGENDORE ST
3350	4450	610.	619	9.	101.5	0.4	864.	884	20.	102.3	0.7	*Bungendore St est of Warrooo St
3407	2093	598.	540	-58.	90.3	2.4	No Back Link Present .	598.	540	-58.	90.3	*LANYON Dr - Tomsitt Dr- Hoover Rd NB
3409	4148	No Forward Link Present .					1021.	1008	-13.	98.7	0.4	*LANYON Dr - Tomsitt Dr - Hoover Rd SB
2316	2319	212.	209	-3.	98.6	0.2	294.	268	-26.	91.2	1.6	*HALLORAN Dr.- #44_Jerrabomberra Hill Rd. - Tully Pl.
3005	4238	115.	149	34.	129.6	3.0	287.	409	122.	142.5	6.5	*COOMA Rd.- Candlebark Rd. - Wickerslack 07
4211	3973	504.	573	69.	113.7	3.0	No Back Link Present .	504.	573	69.	113.7	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane WST NB
4210	3224	No Forward Link Present .					1375.	1282	-93.	93.2	2.6	*TOMPSITT Dr.- Lanyon Dr. end - KERB/Middle Lane EST SB
2772	2771	682.	731	49.	107.2	1.8	407.	448	41.	110.1	2.0	*URIARA Rd.- #51_Railway Ave. - Blackall Ave./ EST bound
NOTE												
3740	2771	32.	43	11.	134.4	1.8	58.	66	8.	113.8	1.0	*BLACKALL Ave.- #8_Morton St. - Uriara Rd.
NOTE												
2156	3114	109.	102	-7.	93.6	0.7	113.	111	-2.	98.2	0.2	*Morton Street - btw Agnes Ave. and Ross Road
2718	3230	35.	52	17.	148.6	2.6	50.	47	-3.	94.0	0.4	*Surveyor Street - btw Agnes Ave. and Ross Road
2381	2380	37.	65	28.	175.7	3.9	62.	79	17.	127.4	2.0	*EARLY St. #20_Agnes Ave - Ross Rd
NOTE												
3283	2195	1364.	1297	-67.	95.1	1.8	No Back Link Present .	1364.	1297	-67.	95.1	*CANNBERRA Ave.Tharwa Rd. - Lanyon Dr./ KERB&Middle Lane EB 2004
2987	2191	No Forward Link Present .					1226.	1214	-12.	99.0	0.3	*CANNBERRA Ave.Lanyon Dr. - Ross Rd.KERB&Middle Lane WB 2007
2446	2445	39.	51	12.	130.8	1.8	48.	93	45.	193.8	5.4	*CREST PARK Pde.- #20_Weir Pl. - Telopea Cresc. 07
4390	4004	185.	137	-48.	74.1	3.8	202.	161	-41.	79.7	3.0	*COLLETT St.- #119_Erin St. - Campbell St.
2365	2362	174.	154	-20.	88.5	1.6	104.	111	7.	106.7	0.7	*ERIN St.- #1_Crawford St. - Collett St.
2997	2995	874.	804	-70.	92.0	2.4	529.	550	21.	104.0	0.9	*CRAWFORD St.- Campbell St-Killard St.
2981	4291	55.	80	25.	145.5	3.0	125.	109	-16.	87.2	1.5	*ANTILL St.- #11_Campbell St. - Crawford St.
3126	3511	No Forward Link Present .					332.	307	-25.	92.5	1.4	*LOWE St. - Morisset St. - Campbell St./ NTH bound. 05
4307	3127	420.	481	61.	114.5	2.9	No Back Link Present .	420.	481	61.	114.5	*LOWE St. - Morisset St. - Campbell St./ STH bound. 05
4311	3290	905.	756	-149.	83.5	5.2	No Back Link Present .	905.	756	-149.	83.5	*FARRER Pl. -Campbell St. - Lowe St EB
4317	3183	No Forward Link Present .					1141.	1160	19.	101.7	0.6	*FARRER Pl. -Campbell St. - Lowe St WB
7329	8028	792.	702	-90.	88.6	3.3	554.	538	-16.	97.1	0.7	*YASS Rd.- ACT border - Rail bridge (ZC245)
9230	3609	419.	515	96.	122.9	4.4	145.	227	82.	156.6	6.0	*MCEWAN Ave nth of HENDERSON St
3021	2731	940.	1071	131.	113.9	4.1	461.	567	106.	123.0	4.7	*URIARA Rd.- Rail Bridge - Kendall Ave.Nth (ZC247)
2990	2296	1757.	1561	-196.	88.8	4.8	No Back Link Present .	1757.	1561	-196.	88.8	*Canberra Dr. North of KENDALL Ave EB (ZC248) 08
2741	2295	No Forward Link Present .					828.	827	-1.	99.9	0.0	*Canberra Dr. North of KENDALL Ave WB (ZC248) 08
5173	2770	1406.	1311	-95.	93.2	2.6	969.	1071	102.	110.5	3.2	*LANYON Dr.- ACT Border - Tomsitt Dr./ To QBN (ZC249)
4452	3313	98.	148	50.	151.0	4.5	49.	73	24.	149.0	3.1	*OLD COOMA Rd.- Sth. of Thoroughbread Dr. (ZC250)
2218	2248	57.	57	0.	100.0	0.0	137.	77	-60.	56.2	5.8	*Lorrn St btw Morton St and Kendall Ave Nth
4060	2926	107.	115	8.	107.5	0.8	62.	81	19.	130.6	2.2	*Morton St Btw Richard Ave-Frederick St
3362	4067	137.	108	-29.	78.8	2.6	84.	59	-25.	70.2	3.0	*STORNAWAY Rd. #77_Surveyor St. - Meredith St.
2402	2673	50.	69	19.	138.0	2.5	122.	108	-14.	88.5	1.3	*CARWOOLA St nth of DODSWORTH Ave
2403	2402	8.	18	10.	225.0	2.8	12.	25	13.	208.3	3.0	*DODSWORTH Ave wst of SEVERNE St
4001	4356	63.	74	11.	117.5	1.3	102.	167	65.	163.7	5.6	*CAMERON Rd north of ALANBAR St 06
2650	2651	336.	389	53.	115.8	2.8	155.	213	58.	137.4	4.3	*BARRACKS FLAT Dr Est of COOMA Rd

Number of links = 63 Number of forward links = 53 Number of back links = 53

TOTALS	FORWARD	BACK	TOTALS
COUNT	17243.	18521.	35764.

VOLUME 17401. 19119. 36520.
 CHANGE 158. 598. 756.
 % 101. 103. 102.
 CORREL.
 COEFF. 0.991 0.988 0.988
 %RMS 17.16 16.78 13.91
 r^2 0.983 0.976 0.976
 GEH 1.2 4.4 4.0

GEH <5 <7 <10 <12 >12
 # 92 105 106 106 0
 % 86.8 99.1 100.0 100.0 0.0

Cordon Number : 11
 Description : *10 Canberra - Belconnen Cordon

		FORWARD				BACK				TOTAL						
NODE1	NODE2	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	
7512	8056	550.	662	112.	120.4	4.5	900.	1008	108.	112.0	3.5	1450.	1670	220.	115.2	*Kuringa Dr Barton-Owen Dixon
7615	7653	1250.	1436	186.	114.9	5.1	900.	787	-113.	87.4	3.9	2150.	2223	73.	103.4	*William Slim Dr Barton-Chuculba
8823	8822	600.	552	-48.	92.0	2.0	800.	1008	208.	126.0	6.9	1400.	1560	160.	111.4	*Ellenborough Street
7599	9163	650.	629	-21.	96.8	0.8	No Back Link Present .				650.	629	-21.	96.8	*Belconnen Way EB	
7169	9165	No Forward Link Present .					750.	912	162.	121.6	5.6	750.	912	162.	121.6	*Belconnen Way WB

Number of links = 5 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS	
COUNT	3050.	3350.	6400.	
VOLUME	3279.	3715.	6994.	
CHANGE	229.	365.	594.	
%	108.	111.	109.	
CORREL.				
COEFF.	0.982	-0.230	0.989	
%RMS	16.91	21.13	12.72	
r^2	0.964	0.053	0.979	
GEH	4.1	6.1	7.3	
GEH <5	<7	<10	<12	>12
# 5	8	8	8	0
% 62.5	100.0	100.0	100.0	0.0

Cordon Number : 12
 Description : *11 Canberra - Lake Burley Griffin

		FORWARD				BACK				TOTAL						
NODE1	NODE2	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	GEH	COUNT	VOLUME	CHANGE	%	
7262	9005	1300.	1378	78.	106.0	2.1	No Back Link Present .				1300.	1378	78.	106.0	*Kings Ave EB	
7263	7417	No Forward Link Present .					1300.	981	-319.	75.5	9.4	1300.	981	-319.	75.5	*Kings Ave WB
7307	9156	800.	801	1.	100.1	0.0	450.	212	-238.	47.1	13.1	1250.	1013	-237.	81.0	*Lady Denman Drive NB
7485	8701	1950.	1882	-68.	96.5	1.6	No Back Link Present .				1950.	1882	-68.	96.5	*Tuggeranong Parkway NB	
9111	7477	No Forward Link Present .					2650.	2758	108.	104.1	2.1	2650.	2758	108.	104.1	*Tuggeranong Parkway SB
7731	4864	400.	172	-228.	43.0	13.5	300.	242	-58.	80.7	3.5	700.	414	-286.	59.1	*Coppins Crossing

Number of links = 6 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS		
COUNT	4450.	4700.	9150.		
VOLUME	4233.	4193.	8426.		
CHANGE	-217.	-507.	-724.		
%	95.	89.	92.		
CORREL.					
COEFF.	0.988	0.991	0.987		
%RMS	12.99	20.46	15.01		
r^2	0.975	0.982	0.974		
GEH	3.3	7.6	7.7		
GEH	<5	<7	<10	<12	>12
#	5	5	6	6	2
%	62.5	62.5	75.0	75.0	25.0

Cordon Number : 13
 Description : *12 Canberra - Outer East Canberra

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
9306	7170	1350.	1220	-130.	90.4	3.6	No Back Link Present .				1350.	1220	-130.	90.4	*Hindmarsh EB	
6686	7091	No Forward Link Present .					1500.	1891	391.	126.1	9.5	1500.	1891	391.	126.1	*Hindmarsh WB
9325	7942	900.	1423	523.	158.1	15.3	No Back Link Present .				900.	1423	523.	158.1	*Moreshead Drive EB	
7941	7940	No Forward Link Present .					750.	962	212.	128.3	7.2	750.	962	212.	128.3	*Moreshead Drive WB
6905	10283	850.	1007	157.	118.5	5.2	850.	1063	213.	125.1	6.9	1700.	2070	370.	121.8	*Fairbairn Ave
7205	8787	1200.	1149	-51.	95.8	1.5	No Back Link Present .				1200.	1149	-51.	95.8	*Federal Highway EB	
7186	7818	No Forward Link Present .					200.	340	140.	170.0	8.5	200.	340	140.	170.0	*Federal Highway WB

Number of links = 7 Number of forward links = 4 Number of back links = 4

TOTALS	FORWARD	BACK	TOTALS		
COUNT	4300.	3300.	7600.		
VOLUME	4799.	4256.	9055.		
CHANGE	499.	956.	1455.		
%	112.	129.	119.		
CORREL.					
COEFF.	0.028	0.999	0.911		
%RMS	30.27	35.88	30.25		
r^2	0.001	0.998	0.830		
GEH	7.4	15.6	15.9		
GEH	<5	<7	<10	<12	>12
#	2	4	7	7	1
%	25.0	50.0	87.5	87.5	12.5

Cordon Number : 14
 Description : *13 Canberra - Tuggeranong Cordon

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
6834	5463	450.	399	-51.	88.7	2.5	500.	534	34.	106.8	1.5	950.	933	-17.	98.2	*Namatjira Drive
5058	5354	1050.	1269	219.	120.9	6.4	No Back Link Present .				1050.	1269	219.	120.9	*Tuggeranong Parkway NB	
5458	5067	No Forward Link Present .					2750.	3130	380.	113.8	7.0	2750.	3130	380.	113.8	*Tuggeranong Parkway SB
5501	5740	600.	1058	458.	176.3	15.9	No Back Link Present .				600.	1058	458.	176.3	*Erindale Drive NB	
5734	5739	No Forward Link Present .					2100.	1919	-181.	91.4	4.0	2100.	1919	-181.	91.4	*Erindale Drive SB
5015	6413	150.	265	115.	176.7	8.0	350.	1033	683.	295.1	26.0	500.	1298	798.	259.6	*Mugga Road

5135	5618	750.	1246	496.	166.1	15.7	No Back Link Present .	750.	1246	496.	166.1	*Monaro Highway NB
5293	5116	No Forward Link Present .					3150.	3303	153.	104.9	2.7	*Monaro Highway SB
6398	6650	950.	1361	411.	143.3	12.1	No Back Link Present .	950.	1361	411.	143.3	*Canberra Ave NB
6399	6649	No Forward Link Present .					2300.	2483	183.	108.0	3.7	*Canberra Ave SB

Number of links = 10 Number of forward links = 6 Number of back links = 6

TOTALS	FORWARD	BACK	TOTALS
COUNT	3950.	11150.	15100.
VOLUME	5598.	12402.	18000.
CHANGE	1648.	1252.	2900.
%	142.	111.	119.
CORREL.			
COEFF.	0.918	0.967	0.959
%RMS	56.37	20.16	27.43
r^2	0.843	0.936	0.921
GEH	23.9	11.5	22.5
GEH	<5	<7	<10 <12 >12
#	5	6	8 8 4
%	41.7	50.0	66.7 66.7 33.3

Cordon Number : 15
Description : *14 Spot counts

NODE1	NODE2	FORWARD				GEH	BACK				GEH	TOTAL				
		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%		COUNT	VOLUME	CHANGE	%	
7239	7241	500.	593	93.	118.6	4.0	1100.	1275	175.	115.9	5.1	1600.	1868	268.	116.8	*Aikman
5225	5080	1450.	1452	2.	100.1	0.1	850.	958	108.	112.7	3.6	2300.	2410	110.	104.8	*Ashley
8946	9238	550.	404	-146.	73.5	6.7	No Back Link Present .				550.	404	-146.	73.5	*Barton	
7695	9239	No Forward Link Present .					1300.	1672	372.	128.6	9.7	1300.	1672	372.	128.6	*Barton
8223	8180	250.	391	141.	156.4	7.9	500.	813	313.	162.6	12.2	750.	1204	454.	160.5	*Ginninderra
6556	7909	1250.	1143	-107.	91.4	3.1	No Back Link Present .				1250.	1143	-107.	91.4	*Gungalin	
6555	7911	No Forward Link Present .					1550.	1821	271.	117.5	6.6	1550.	1821	271.	117.5	*Gungalin
10098	10086	350.	425	75.	121.4	3.8	No Back Link Present .				350.	425	75.	121.4	*National Circus	
10099	10087	No Forward Link Present .					500.	157	-343.	31.4	18.9	500.	157	-343.	31.4	*N C
9362	8487	400.	318	-82.	79.5	4.3	No Back Link Present .				400.	318	-82.	79.5	*Southern Cross	
7301	8501	No Forward Link Present .					850.	547	-303.	64.4	11.5	850.	547	-303.	64.4	*Southern Cross
9806	8830	1100.	1171	71.	106.5	2.1	No Back Link Present .				1100.	1171	71.	106.5	*Wentworth	
7982	8829	No Forward Link Present .					750.	704	-46.	93.9	1.7	750.	704	-46.	93.9	*Wentworth

Number of links = 13 Number of forward links = 8 Number of back links = 8

TOTALS	FORWARD	BACK	TOTALS
COUNT	5850.	7400.	13250.
VOLUME	5897.	7947.	13844.
CHANGE	47.	547.	594.
%	101.	107.	104.
CORREL.			
COEFF.	0.973	0.911	0.949
%RMS	14.50	30.68	24.75
r^2	0.948	0.830	0.900
GEH	0.6	6.2	5.1
GEH	<5	<7	<10 <12 >12
#	8	11	13 14 2
%	50.0	68.8	81.2 87.5 12.5

CORDON terminated successfully

MORNING PEAK

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+-----+
| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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+-----+
| TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS TR |
| TRACKS +-----+ TRACKS |
| S TRACKS | |S TRACKS |
| KS TRACK| Program : JURNEY |KS TRACK |
| CKS TRAC| Version : V7.03 |CKS TRAC |
| ACKS TRA| |ACKS TRA |
| RACKS TR| Date run : 29-JAN-13 |RACKS TR |
| TRACKS T| Time run : 16:31:54 |TRACKS T |
| TRACKS | Platform : Win 95/NT | TRACKS |
| S TRACKS+-----+S TRACKS |
| KS TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS |
+-----+
| TRACKS Licenced to |
| Gabites Porter |
| at : Christchurch, N.Z. |
+-----+
Parameter version : V5.20
    
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JURNEY Data File : JURNEY.AMP
Loaded Network : QM11NL.000
*QUEANBEYAN AM - 2011 ALL
16400 Links in network
    
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| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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Journey 1 Movement Analysis - times in seconds

RouteAEB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
10272 - 10274	15 0	5	52.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	
10274 - 10270	15 0	9	52.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0	1.0	0.0	
10270 - 10260	15 0	81	52.1	0.0	5.6	0.0	0.0	0.0	5.6	0.0	6.6	0.0	
10260 - 10266	15 0	9	53.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	7.2	0.0	
10266 - 10265	15 6	5	53.4	1.4	0.3	13.0	26.0	0.0	26.3	13.0	33.5	13.0	
10265 - 10267	16 0	5	63.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	33.8	13.0	
10267 - 10261	16 0	9	63.8	0.0	0.5	0.0	0.0	0.0	0.5	0.0	34.3	13.0	
10261 - 4511	16 0	405	63.7	0.0	22.9	0.0	0.0	0.0	22.9	0.0	57.2	13.0	
4511 - 6394	16 0	173	64.2	0.0	9.7	0.0	0.0	0.0	9.7	0.0	66.9	13.0	
6394 - 4510	16 0	82	64.2	0.0	4.6	0.0	0.0	0.0	4.6	0.0	71.5	13.0	
4510 - 4513	16 0	288	64.5	0.0	16.1	0.0	0.0	0.0	16.1	0.0	87.6	13.0	
4513 - 6643	16 0	546	64.5	0.0	30.5	0.0	0.0	0.0	30.5	0.0	118.0	13.0	
6643 - 6645	16 0	13	64.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	118.8	13.0	
6645 - 6655	16 7	9	64.5	0.4	0.5	82.0	87.0	28.0	87.5	110.0	206.3	123.0	
6655 - 6651	8 0	11	78.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	206.8	123.0	
6651 - 6649	8 0	12	78.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	207.3	123.0	
6649 - 6399	8 0	1987	77.2	0.0	92.7	0.0	0.0	0.0	92.7	0.0	300.0	123.0	
6399 - 6400	8 0	118	77.2	0.0	5.5	0.0	0.0	0.0	5.5	0.0	305.5	123.0	
6400 - 6401	8 6	40	77.2	1.3	1.9	110.0	13.0	0.0	14.9	110.0	320.3	233.0	
6401 - 6402	8 0	47	78.1	0.0	2.2	0.0	0.0	0.0	2.2	0.0	322.5	233.0	
6402 - 6403	8 0	73	78.1	0.0	3.4	0.0	0.0	0.0	3.4	0.0	325.9	233.0	
6403 - 8990	8 0	538	78.1	0.0	24.8	0.0	0.0	0.0	24.8	0.0	350.7	233.0	
8990 - 2990	8 0	300	79.0	0.0	13.7	0.0	0.0	0.0	13.7	0.0	364.3	233.0	
2990 - 2296	16 0	31	64.2	0.0	1.7	0.0	0.0	0.0	1.7	0.0	366.1	233.0	CANBERRA Ave
2296 - 2297	16 0	18	63.8	0.0	1.0	0.0	0.0	0.0	1.0	0.0	367.1	233.0	CANBERRA Ave
2297 - 2292	16 7	4	63.8	0.4	0.2	40.0	6.0	8.0	6.2	48.0	373.3	281.0	CANBERRA Ave
2292 - 2298	16 0	5	64.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	373.6	281.0	CANBERRA Ave
2298 - 2294	16 0	21	64.2	0.0	1.2	0.0	0.0	0.0	1.2	0.0	374.8	281.0	CANBERRA Ave
2294 - 4104	16 0	235	64.4	0.0	13.1	0.0	0.0	0.0	13.1	0.0	387.9	281.0	CANBERRA Ave
4104 - 4109	16 0	11	64.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0	388.5	281.0	CANBERRA Ave
4109 - 4107	16 0	4	64.1	0.0	0.2	0.0	0.0	0.0	0.2	0.0	388.8	281.0	CANBERRA Ave
4107 - 4108	16 0	5	64.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	389.0	281.0	CANBERRA Ave
4108 - 4105	16 0	8	64.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	389.5	281.0	CANBERRA Ave
4105 - 4111	16 0	154	64.0	0.0	8.7	0.0	0.0	0.0	8.7	0.0	398.2	281.0	CANBERRA Ave
4111 - 4115	16 0	11	64.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	398.8	281.0	CANBERRA Ave
4115 - 4114	16 0	5	64.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	399.1	281.0	CANBERRA Ave
4114 - 4116	16 0	5	63.9	0.0	0.3	0.0	0.0	0.0	0.3	0.0	399.3	281.0	CANBERRA Ave
4116 - 4112	16 0	11	63.9	0.0	0.6	0.0	0.0	0.0	0.6	0.0	400.0	281.0	CANBERRA Ave
4112 - 3280	7 0	743	68.6	0.0	39.0	0.0	0.0	0.0	39.0	0.0	438.9	281.0	CANBERRA Ave
3280 - 2732	7 0	116	69.0	5.8	6.1	72.0	0.0	0.0	6.1	72.0	445.0	353.0	CANBERRA Ave
2732 - 2733	7 0	80	69.0	0.0	4.2	0.0	0.0	0.0	4.2	0.0	449.2	353.0	CANBERRA Ave
2733 - 3283	7 0	50	67.8	0.0	2.7	0.0	0.0	0.0	2.7	0.0	451.8	353.0	CANBERRA Ave
3283 - 2195	7 0	552	67.8	0.0	29.3	0.0	0.0	0.0	29.3	0.0	481.1	353.0	CANBERRA Ave
2195 - 2197	7 0	16	68.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	482.0	353.0	CANBERRA Ave
2197 - 2200	7 6	3	68.7	0.3	0.2	42.0	20.0	24.0	20.2	66.0	502.1	419.0	CANBERRA Ave
2200 - 2198	7 0	3	67.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	502.3	419.0	CANBERRA Ave
2198 - 2196	7 0	17	67.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	503.2	419.0	CANBERRA Ave
2196 - 3285	7 0	85	67.5	0.0	4.5	0.0	0.0	0.0	4.5	0.0	507.7	419.0	CANBERRA Ave

3285 - 2193	7	0	98	67.5	0.0	5.2	0.0	0.0	0.0	5.2	0.0	513.0	419.0	CANBERRA Ave
2193 - 2394	7	0	12	68.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	513.6	419.0	CANBERRA Ave
2394 - 2395	7	6	5	68.3	1.1	0.3	17.0	11.0	2.0	11.3	19.0	524.9	438.0	CANBERRA Ave
2395 - 2396	7	0	5	68.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	525.1	438.0	CANBERRA Ave
2396 - 2392	7	0	11	68.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	525.7	438.0	CANBERRA Ave
2392 - 3287	7	0	114	68.2	0.0	6.0	0.0	0.0	0.0	6.0	0.0	531.7	438.0	CANBERRA Ave
3287 - 4120	7	0	136	68.2	0.0	7.2	0.0	0.0	0.0	7.2	0.0	538.9	438.0	CANBERRA Ave
4120 - 4122	7	0	6	68.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	539.2	438.0	CANBERRA Ave
4122 - 4121	7	0	4	68.2	0.8	0.2	19.0	0.0	0.0	0.2	19.0	539.4	457.0	CANBERRA Ave
4121 - 4123	7	0	4	68.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	539.6	457.0	FARRER Pl
4123 - 4117	7	0	9	68.2	0.0	0.5	0.0	0.0	0.0	0.5	0.0	540.1	457.0	FARRER Pl
4117 - 3836	7	0	11	68.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	540.7	457.0	-- no name --
3836 - 3289	7	0	14	67.6	0.0	0.7	0.0	0.0	0.0	0.7	0.0	541.4	457.0	FARRER Pl
3289 - 3835	7	0	15	67.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	542.2	457.0	FARRER Pl
3835 - 4311	7	0	182	67.5	0.0	9.7	0.0	0.0	0.0	9.7	0.0	551.9	457.0	FARRER Pl
4311 - 3290	7	0	137	67.6	0.0	7.3	0.0	0.0	0.0	7.3	0.0	559.2	457.0	FARRER Pl
3290 - 2400	7	0	34	67.6	0.0	1.8	0.0	0.0	0.0	1.8	0.0	561.1	457.0	FARRER Pl
2400 - 2399	16	6	7	62.7	0.9	0.4	28.0	10.0	9.0	10.4	37.0	571.5	494.0	FARRER Pl
2399 - 2491	15	0	8	52.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	572.0	494.0	MONARO St
2491 - 2397	15	0	26	52.5	0.0	1.8	0.0	0.0	0.0	1.8	0.0	573.8	494.0	MONARO St
2397 - 4439	15	0	85	52.5	0.0	5.8	0.0	0.0	0.0	5.8	0.0	579.6	494.0	MONARO St
4439 - 2493	15	0	99	52.6	0.0	6.8	0.0	0.0	0.0	6.8	0.0	586.4	494.0	MONARO St
2493 - 2497	15	0	12	52.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	587.2	494.0	MONARO St
2497 - 2492	15	6	5	52.6	0.5	0.3	35.0	75.0	41.0	75.3	76.0	662.6	570.0	MONARO St
2492 - 3264	14	0	5	43.7	0.0	0.4	0.0	0.0	0.0	0.4	0.0	663.0	570.0	CRAWFORD St
3264 - 2452	14	0	10	43.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	663.8	570.0	CRAWFORD St
2452 - 4478	14	0	81	43.7	0.0	6.7	0.0	0.0	0.0	6.7	0.0	670.5	570.0	CRAWFORD St
4478 - 2453	14	0	13	43.7	0.0	1.1	0.0	0.0	0.0	1.1	0.0	671.5	570.0	CRAWFORD St
2453 - 2946	5	0	103	48.7	0.0	7.6	0.0	0.0	0.0	7.6	0.0	679.1	570.0	CRAWFORD St
2946 - 4178	5	3	20	48.7	2.6	1.5	28.0	9.0	0.0	10.5	28.0	689.6	598.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	691.5	598.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	697.8	598.0	CRAWFORD ST
4319 - 4017	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	704.1	598.0	CRAWFORD ST
4017 - 2904	4	0	10	39.2	2.2	0.9	16.0	0.0	0.0	0.9	16.0	705.1	614.0	CRAWFORD ST
2904 - 4018	5	0	9	48.9	0.0	0.7	0.0	0.0	0.0	0.7	0.0	705.7	614.0	THORPE Ave
4018 - 4328	5	0	87	48.9	0.0	6.4	0.0	0.0	0.0	6.4	0.0	712.1	614.0	THORPE Ave
4328 - 4325	5	0	30	49.8	0.0	2.2	0.0	0.0	0.0	2.2	0.0	714.3	614.0	THORPE Ave
4325 - 2281	5	0	148	49.8	22.2	10.7	24.0	0.0	0.0	10.7	24.0	725.0	638.0	THORPE Ave

Modelled Totals	8671	43.1	468.0	257.0	725.0
Observed Totals		0.0	638.0	0.0	638.0

Observed Journey Time =	638.00	Implied Average Speed =	48.9
Modelled Journey Time =	724.99	Modelled Average Speed =	43.1
	113.63%		88.00%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 2 Movement Analysis - times in seconds

RouteAWB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
2281 - 4325	5 0	148	49.1	0.0	10.9	0.0	0.0	0.0	10.9	0.0	10.9	0.0	THORPE Ave
4325 - 4328	5 0	30	49.1	0.0	2.2	0.0	0.0	0.0	2.2	0.0	13.1	0.0	THORPE Ave
4328 - 4018	5 0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.4	0.0	THORPE Ave
4018 - 2904	5 0	9	49.0	1.1	0.7	30.0	0.0	0.0	0.7	30.0	20.1	30.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	21.0	30.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.3	30.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.6	30.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	5.1	1.8	14.0	9.0	0.0	10.8	14.0	44.4	44.0	CRAWFORD ST
4178 - 2946	5 0	20	48.6	0.0	1.5	0.0	0.0	0.0	1.5	0.0	45.9	44.0	CRAWFORD ST
2946 - 2453	5 0	103	48.6	0.0	7.6	0.0	2.0	0.0	9.6	0.0	55.5	44.0	CRAWFORD St
2453 - 4478	14 0	13	43.8	0.0	1.1	0.0	0.0	0.0	1.1	0.0	56.6	44.0	CRAWFORD St
4478 - 2452	14 0	81	43.8	0.0	6.7	0.0	0.0	0.0	6.7	0.0	63.3	44.0	CRAWFORD St
2452 - 3264	14 0	10	43.8	0.0	0.8	0.0	0.0	0.0	0.8	0.0	64.1	44.0	CRAWFORD St
3264 - 2492	14 7	5	43.8	0.8	0.4	24.0	74.0	16.0	74.4	40.0	138.5	84.0	CRAWFORD St
2492 - 2497	15 0	5	53.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	138.8	84.0	MONARO St
2497 - 2494	15 0	14	53.2	0.0	0.9	0.0	0.0	0.0	0.9	0.0	139.8	84.0	MONARO St
2494 - 4440	15 0	92	53.2	0.0	6.2	0.0	0.0	0.0	6.2	0.0	146.0	84.0	MONARO St
4440 - 2398	15 0	91	53.3	0.0	6.1	0.0	0.0	0.0	6.1	0.0	152.1	84.0	MONARO St
2398 - 2491	15 0	26	53.4	0.0	1.8	0.0	0.0	0.0	1.8	0.0	153.9	84.0	MONARO St
2491 - 2399	15 6	8	53.4	0.9	0.5	31.0	9.0	12.0	9.5	43.0	163.4	127.0	MONARO St
2399 - 2400	16 0	7	63.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	163.8	127.0	FARRER Pl
2400 - 3183	7 0	33	68.1	0.0	1.7	0.0	0.0	0.0	1.7	0.0	165.6	127.0	FARRER Pl
3183 - 4317	7 0	72	68.1	0.0	3.8	0.0	0.0	0.0	3.8	0.0	169.4	127.0	FARRER Pl
4317 - 2989	7 0	265	68.2	0.0	14.0	0.0	0.0	0.0	14.0	0.0	183.4	127.0	FARRER Pl
2989 - 4118	7 0	27	68.2	0.0	1.4	0.0	0.0	0.0	1.4	0.0	184.8	127.0	FARRER Pl
4118 - 4123	7 0	6	68.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	185.1	127.0	FARRER Pl
4123 - 4121	7 0	4	68.2	0.5	0.2	30.0	0.0	0.0	0.2	30.0	185.3	157.0	FARRER Pl
4121 - 4122	7 0	4	67.9	0.0	0.2	0.0	0.0	0.0	0.2	0.0	185.5	157.0	CANBERRA Ave
4122 - 4119	7 0	10	67.9	0.0	0.5	0.0	0.0	0.0	0.5	0.0	186.1	157.0	CANBERRA Ave
4119 - 2738	7 0	139	67.9	0.0	7.4	0.0	0.0	0.0	7.4	0.0	193.4	157.0	CANBERRA Ave
2738 - 2393	7 0	110	67.8	0.0	5.8	0.0	0.0	0.0	5.8	0.0	199.3	157.0	CANBERRA Ave
2393 - 2396	7 0	9	68.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	199.8	157.0	CANBERRA Ave
2396 - 2395	7 6	5	68.4	0.9	0.3	19.0	11.0	6.0	11.3	25.0	211.0	182.0	CANBERRA Ave
2395 - 2394	7 0	5	67.9	0.0	0.3	0.0	0.0	0.0	0.3	0.0	211.3	182.0	CANBERRA Ave
2394 - 2391	7 0	12	67.9	0.0	0.6	0.0	0.0	0.0	0.6	0.0	211.9	182.0	CANBERRA Ave
2391 - 2736	7 0	99	67.9	0.0	5.2	0.0	0.0	0.0	5.2	0.0	217.2	182.0	CANBERRA Ave
2736 - 2099	7 0	83	68.4	0.0	4.4	0.0	0.0	0.0	4.4	0.0	221.5	182.0	CANBERRA Ave
2099 - 2198	7 0	16	68.5	0.0	0.8	0.0	0.0	0.0	0.8	0.0	222.4	182.0	CANBERRA Ave
2198 - 2200	7 6	3	68.5	0.3	0.2	34.0	21.0	0.0	21.2	34.0	243.5	216.0	CANBERRA Ave
2200 - 2197	7 0	3	67.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	243.7	216.0	CANBERRA Ave
2197 - 2191	7 0	15	67.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	244.5	216.0	CANBERRA Ave
2191 - 2987	7 0	621	66.9	0.0	33.4	0.0	0.0	0.0	33.4	0.0	277.9	216.0	CANBERRA Ave
2987 - 2988	16 4	53	63.1	4.2	3.0	45.0	10.8	0.0	13.8	45.0	291.7	261.0	CANBERRA Ave
2988 - 3015	6 0	10	57.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	292.4	261.0	CANBERRA Ave
3015 - 3250	6 0	35	57.5	0.0	2.2	0.0	1.2	0.0	3.4	0.0	295.8	261.0	CANBERRA Ave
3250 - 4113	7 0	853	66.2	0.0	46.4	0.0	0.0	0.0	46.4	0.0	342.1	261.0	CANBERRA Ave
4113 - 4116	16 0	9	61.2	0.0	0.5	0.0	0.0	0.0	0.5	0.0	342.7	261.0	CANBERRA Ave
4116 - 4114	16 0	5	61.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	343.0	261.0	CANBERRA Ave

4114 - 4115	16	0	5	61.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0	343.3	261.0	CANBERRA Ave
4115 - 4110	16	0	11	61.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0	343.9	261.0	CANBERRA Ave
4110 - 4106	16	0	159	61.1	0.0	9.4	0.0	0.0	0.0	9.4	0.0	353.3	261.0	CANBERRA Ave
4106 - 4108	16	0	8	61.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	353.7	261.0	CANBERRA Ave
4108 - 4107	16	0	5	61.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0	354.0	261.0	CANBERRA Ave
4107 - 4109	16	0	4	61.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	354.3	261.0	CANBERRA Ave
4109 - 4103	16	0	9	61.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	354.8	261.0	CANBERRA Ave
4103 - 2293	16	0	240	61.3	0.0	14.1	0.0	0.0	0.0	14.1	0.0	368.9	261.0	CANBERRA Ave
2293 - 2298	16	0	20	61.3	0.0	1.2	0.0	0.0	0.0	1.2	0.0	370.1	261.0	CANBERRA Ave
2298 - 2292	16	7	5	61.3	0.3	0.3	59.0	9.0	66.0	9.3	125.0	379.4	386.0	CANBERRA Ave
2292 - 2297	16	0	4	61.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	379.6	386.0	CANBERRA Ave
2297 - 2295	16	0	18	61.4	0.0	1.1	0.0	0.0	0.0	1.1	0.0	380.7	386.0	CANBERRA Ave
2295 - 2741	16	0	29	62.2	0.0	1.7	0.0	0.0	0.0	1.7	0.0	382.3	386.0	CANBERRA Ave
2741 - 4451	8	0	300	77.0	0.0	14.0	0.0	2.2	0.0	16.2	0.0	398.6	386.0	
4451 - 9001	8	0	323	75.6	0.0	15.4	0.0	0.0	0.0	15.4	0.0	413.9	386.0	
9001 - 6404	8	0	184	75.7	0.0	8.8	0.0	0.0	0.0	8.8	0.0	422.7	386.0	
6404 - 6402	8	0	76	75.7	0.0	3.6	0.0	0.0	0.0	3.6	0.0	426.3	386.0	
6402 - 6401	8	6	47	75.7	3.8	2.2	45.0	19.0	0.0	21.2	45.0	447.5	431.0	
6401 - 6400	8	0	40	75.8	0.0	1.9	0.0	0.0	0.0	1.9	0.0	449.4	431.0	
6400 - 6398	8	0	125	75.8	0.0	5.9	0.0	2.8	0.0	8.7	0.0	458.2	431.0	
6398 - 6650	8	0	2013	71.7	0.0	101.1	0.0	0.0	0.0	101.1	0.0	559.2	431.0	
6650 - 6651	8	0	15	76.1	0.0	0.7	0.0	0.0	0.0	0.7	0.0	560.0	431.0	
6651 - 6655	8	7	11	76.1	0.4	0.5	110.0	99.0	21.0	99.5	131.0	659.5	562.0	
6655 - 6645	16	0	9	63.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	660.0	562.0	
6645 - 6644	16	0	15	63.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	660.8	562.0	
6644 - 4514	16	0	545	63.2	0.0	31.0	0.0	0.0	0.0	31.0	0.0	691.9	562.0	
4514 - 6395	16	0	286	63.4	0.0	16.2	0.0	0.0	0.0	16.2	0.0	708.1	562.0	
6395 - 4512	16	0	254	63.5	0.0	14.4	0.0	0.0	0.0	14.4	0.0	722.5	562.0	
4512 - 10262	16	0	408	63.5	0.0	23.1	0.0	0.0	0.0	23.1	0.0	745.7	562.0	
10262 - 10267	16	0	9	63.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	746.2	562.0	
10267 - 10265	16	6	5	63.7	0.2	0.3	89.0	25.0	7.0	25.3	96.0	771.4	658.0	
10265 - 10266	15	0	5	52.4	0.0	0.3	0.0	0.0	0.0	0.3	0.0	771.8	658.0	
10266 - 10259	15	0	9	52.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	772.4	658.0	
10259 - 10271	15	0	79	52.4	0.0	5.4	0.0	0.0	0.0	5.4	0.0	777.8	658.0	
10271 - 10274	15	0	10	52.4	0.0	0.7	0.0	0.0	0.0	0.7	0.0	778.5	658.0	
10274 - 10272	15	6	5	52.4	1.5	0.3	12.0	30.6	0.0	30.9	12.0	809.5	670.0	
Modelled Totals	8713	38.8		483.9		325.6			809.5					
Observed Totals				0.0		671.0			0.0		671.0			
Observed Journey Time =	671.00													Implied Average Speed = 46.7
Modelled Journey Time =	809.46													Modelled Average Speed = 38.8
	120.64%													82.89%

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+-----+
| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
+-----+
    
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Journey 3 Movement Analysis - times in seconds

RouteBEB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
8990 - 8989	7 0	262	67.4	0.0	14.0	0.0	0.0	0.0	14.0	0.0	14.0	0.0	
8989 - 7256	7 0	483	67.4	0.0	25.8	0.0	0.0	0.0	25.8	0.0	39.8	0.0	
7256 - 7255	7 0	52	67.5	0.0	2.8	0.0	0.0	0.0	2.8	0.0	42.6	0.0	
7255 - 3021	7 0	92	67.5	0.0	4.9	0.0	0.0	0.0	4.9	0.0	47.5	0.0	
3021 - 2731	7 0	28	67.5	0.0	1.5	0.0	0.0	0.0	1.5	0.0	49.0	0.0	URIARRA Rd
2731 - 2730	7 0	139	67.5	0.0	7.4	0.0	0.0	0.0	7.4	0.0	56.4	0.0	URIARRA Rd
2730 - 4173	6 3	25	56.9	1.3	1.6	69.0	9.0	0.0	10.6	69.0	67.0	69.0	URIARRA Rd
4173 - 2774	6 0	24	57.2	0.0	1.5	0.0	0.0	0.0	1.5	0.0	68.5	69.0	URIARRA Rd
2774 - 2773	6 0	90	57.2	0.0	5.7	0.0	0.0	0.0	5.7	0.0	74.1	69.0	URIARRA Rd
2773 - 2416	6 0	82	57.4	0.0	5.1	0.0	0.0	0.0	5.1	0.0	79.3	69.0	URIARRA Rd
2416 - 2179	6 0	142	57.2	0.0	8.9	0.0	0.0	0.0	8.9	0.0	88.2	69.0	URIARRA Rd
2179 - 2246	6 0	74	57.0	0.0	4.7	0.0	0.0	0.0	4.7	0.0	92.9	69.0	URIARRA Rd
2246 - 4059	6 0	129	57.1	0.0	8.1	0.0	0.0	0.0	8.1	0.0	101.0	69.0	URIARRA Rd
4059 - 2440	5 0	10	46.6	0.9	0.8	42.0	0.0	0.0	0.8	42.0	101.8	111.0	URIARRA Rd
2440 - 4058	5 0	15	46.8	0.0	1.2	0.0	0.0	0.0	1.2	0.0	102.9	111.0	URIARRA Rd
4058 - 2735	6 0	119	57.2	0.0	7.5	0.0	0.0	0.0	7.5	0.0	110.4	111.0	URIARRA Rd
2735 - 2734	6 0	39	57.2	0.0	2.5	0.0	0.0	0.0	2.5	0.0	112.9	111.0	URIARRA Rd
2734 - 2772	6 0	75	57.3	0.0	4.7	0.0	0.0	0.0	4.7	0.0	117.6	111.0	URIARRA Rd
2772 - 2771	6 0	152	57.2	0.0	9.6	0.0	0.0	0.0	9.6	0.0	127.2	111.0	URIARRA Rd
2771 - 4056	5 0	21	46.5	0.0	1.6	0.0	0.0	0.0	1.6	0.0	128.8	111.0	URIARRA Rd
4056 - 2111	5 0	12	46.5	1.5	0.9	28.0	0.0	0.0	0.9	28.0	129.7	139.0	URIARRA Rd
2111 - 4057	5 0	13	46.5	0.0	1.0	0.0	0.0	0.0	1.0	0.0	130.7	139.0	URIARRA Rd
4057 - 3020	6 0	228	57.0	41.0	14.4	20.0	0.0	0.0	14.4	20.0	145.1	159.0	URIARRA Rd
3020 - 3259	6 0	6	56.8	0.0	0.4	0.0	0.0	0.0	0.4	0.0	145.5	159.0	URIARRA Rd
3259 - 2451	6 0	72	56.8	0.0	4.6	0.0	0.0	0.0	4.6	0.0	150.1	159.0	URIARRA Rd
2451 - 2759	6 0	62	57.1	0.0	3.9	0.0	0.0	0.0	3.9	0.0	154.0	159.0	URIARRA Rd
2759 - 2999	6 0	117	57.2	0.0	7.4	0.0	0.0	0.0	7.4	0.0	161.3	159.0	CRAWFORD St
2999 - 3094	6 0	7	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	161.8	159.0	CRAWFORD ST
3094 - 3092	6 0	4	57.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	162.0	159.0	CRAWFORD ST
3092 - 3093	6 0	4	57.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	162.3	159.0	CRAWFORD ST
3093 - 3091	6 0	7	57.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	162.7	159.0	CRAWFORD ST
3091 - 2959	6 0	46	57.0	0.0	2.9	0.0	0.0	0.0	2.9	0.0	165.6	159.0	CRAWFORD ST
2959 - 3182	6 0	26	56.7	0.0	1.7	0.0	0.0	0.0	1.7	0.0	167.3	159.0	CRAWFORD ST
3182 - 2997	6 0	19	56.7	0.0	1.2	0.0	0.0	0.0	1.2	0.0	168.5	159.0	CRAWFORD ST
2997 - 2995	6 0	6	56.7	0.8	0.4	26.0	0.0	0.0	0.4	26.0	168.9	185.0	CRAWFORD ST
2995 - 2996	6 0	6	58.7	0.0	0.4	0.0	0.0	0.0	0.4	0.0	169.2	185.0	CRAWFORD ST
2996 - 4026	6 0	9	58.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	169.8	185.0	CRAWFORD ST
4026 - 4434	6 0	106	58.7	0.0	6.5	0.0	0.0	0.0	6.5	0.0	176.3	185.0	CRAWFORD St
4434 - 4292	6 0	51	58.7	0.0	3.1	0.0	0.0	0.0	3.1	0.0	179.4	185.0	CRAWFORD St
4292 - 4023	6 0	49	58.7	0.0	3.0	0.0	0.0	0.0	3.0	0.0	182.4	185.0	CRAWFORD St
4023 - 2994	6 0	10	58.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	183.0	185.0	CRAWFORD St
2994 - 2992	6 0	4	58.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	183.3	185.0	CRAWFORD St
2992 - 2993	6 0	5	58.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	183.6	185.0	CRAWFORD St
2993 - 4021	6 0	10	58.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	184.2	185.0	CRAWFORD St
4021 - 4445	6 0	37	58.6	0.0	2.3	0.0	0.0	0.0	2.3	0.0	186.5	185.0	CRAWFORD St
4445 - 4303	6 0	69	58.6	0.0	4.2	0.0	0.0	0.0	4.2	0.0	190.7	185.0	CRAWFORD St
4303 - 4022	6 0	104	58.6	0.0	6.4	0.0	0.0	0.0	6.4	0.0	197.1	185.0	CRAWFORD St
4022 - 2991	6 0	8	58.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	197.6	185.0	CRAWFORD ST

2991 - 2899	6	7	4	58.6	0.4	0.2	37.0	11.0	16.0	11.2	53.0	208.8	238.0	CRAWFORD ST
2899 - 2900	6	0	4	59.1	0.0	0.2	0.0	0.0	0.0	0.2	0.0	209.1	238.0	CRAWFORD ST
2900 - 2761	6	0	8	59.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	209.6	238.0	CRAWFORD ST
2761 - 4436	6	0	107	59.1	0.0	6.5	0.0	0.0	0.0	6.5	0.0	216.1	238.0	CRAWFORD St
4436 - 2762	6	0	72	59.1	0.0	4.4	0.0	0.0	0.0	4.4	0.0	220.5	238.0	CRAWFORD St
2762 - 3008	6	0	32	59.1	0.0	1.9	0.0	0.0	0.0	1.9	0.0	222.4	238.0	CRAWFORD St
3008 - 3307	6	0	13	59.1	0.0	0.8	0.0	0.0	0.0	0.8	0.0	223.2	238.0	CRAWFORD St
3307 - 2492	6	7	5	59.1	0.8	0.3	22.0	39.0	34.0	39.3	56.0	262.5	294.0	CRAWFORD St
2492 - 3264	14	0	5	43.7	0.0	0.4	0.0	0.0	0.0	0.4	0.0	262.9	294.0	CRAWFORD St
3264 - 2452	14	0	10	43.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	263.8	294.0	CRAWFORD St
2452 - 4478	14	0	81	43.7	0.0	6.7	0.0	0.0	0.0	6.7	0.0	270.4	294.0	CRAWFORD St
4478 - 2453	14	0	13	43.7	0.0	1.1	0.0	0.0	0.0	1.1	0.0	271.5	294.0	CRAWFORD St
2453 - 2946	5	0	103	48.7	0.0	7.6	0.0	0.0	0.0	7.6	0.0	279.1	294.0	CRAWFORD St
2946 - 4178	5	3	20	48.7	2.4	1.5	30.0	9.0	0.0	10.5	30.0	289.6	324.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	291.4	324.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	297.8	324.0	CRAWFORD ST
4319 - 4017	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	304.1	324.0	CRAWFORD ST
4017 - 2904	4	0	10	39.2	1.8	0.9	20.0	0.0	0.0	0.9	20.0	305.0	344.0	CRAWFORD ST
2904 - 4018	5	0	9	48.9	0.0	0.7	0.0	0.0	0.0	0.7	0.0	305.7	344.0	THORPE Ave
4018 - 4328	5	0	87	48.9	0.0	6.4	0.0	0.0	0.0	6.4	0.0	312.1	344.0	THORPE Ave
4328 - 4325	5	0	30	49.8	0.0	2.2	0.0	0.0	0.0	2.2	0.0	314.3	344.0	THORPE Ave
4325 - 2281	5	0	148	49.8	22.2	10.7	24.0	0.0	0.0	10.7	24.0	325.0	368.0	THORPE Ave

Modelled Totals	4069	45.1		257.0		68.0		325.0						
Observed Totals				0.0		368.0		0.0		368.0				

Observed Journey Time =	368.00	Implied Average Speed =	39.8
Modelled Journey Time =	324.96	Modelled Average Speed =	45.1
	88.30%		113.25%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 4 Movement Analysis - times in seconds

RouteBWB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
2281 - 4325	5 0	148	49.1	0.0	10.9	0.0	0.0	0.0	10.9	0.0	10.9	0.0	THORPE Ave
4325 - 4328	5 0	30	49.1	0.0	2.2	0.0	0.0	0.0	2.2	0.0	13.1	0.0	THORPE Ave
4328 - 4018	5 0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.4	0.0	THORPE Ave
4018 - 2904	5 0	9	49.0	1.2	0.7	27.0	0.0	0.0	0.7	27.0	20.1	27.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	21.0	27.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.3	27.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.6	27.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	4.5	1.8	16.0	9.0	0.0	10.8	16.0	44.4	43.0	CRAWFORD ST
4178 - 2946	5 0	20	48.6	0.0	1.5	0.0	0.0	0.0	1.5	0.0	45.9	43.0	CRAWFORD ST
2946 - 2453	5 0	103	48.6	0.0	7.6	0.0	2.0	0.0	9.6	0.0	55.5	43.0	CRAWFORD St
2453 - 4478	14 0	13	43.8	0.0	1.1	0.0	0.0	0.0	1.1	0.0	56.6	43.0	CRAWFORD St
4478 - 2452	14 0	81	43.8	0.0	6.7	0.0	0.0	0.0	6.7	0.0	63.3	43.0	CRAWFORD St
2452 - 3264	14 0	10	43.8	0.0	0.8	0.0	0.0	0.0	0.8	0.0	64.1	43.0	CRAWFORD St
3264 - 2492	14 7	5	43.8	0.7	0.4	26.0	74.0	26.0	74.4	52.0	138.5	95.0	CRAWFORD St
2492 - 3307	6 0	5	59.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	138.8	95.0	CRAWFORD St
3307 - 3516	6 0	13	59.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	139.6	95.0	CRAWFORD St
3516 - 3515	6 0	33	59.3	0.0	2.0	0.0	0.0	0.0	2.0	0.0	141.6	95.0	CRAWFORD ST
3515 - 4435	6 0	71	59.4	0.0	4.3	0.0	0.0	0.0	4.3	0.0	145.9	95.0	CRAWFORD ST
4435 - 3514	6 0	107	59.4	0.0	6.5	0.0	0.0	0.0	6.5	0.0	152.4	95.0	CRAWFORD ST
3514 - 2900	6 0	6	59.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	152.7	95.0	CRAWFORD ST
2900 - 2899	6 7	4	59.4	0.7	0.2	21.0	11.0	28.0	11.2	49.0	164.0	144.0	CRAWFORD ST
2899 - 2991	6 0	4	58.9	0.0	0.2	0.0	0.0	0.0	0.2	0.0	164.2	144.0	CRAWFORD ST
2991 - 4020	6 0	7	58.9	0.0	0.4	0.0	0.0	0.0	0.4	0.0	164.6	144.0	CRAWFORD ST
4020 - 4309	6 0	106	58.9	0.0	6.5	0.0	0.0	0.0	6.5	0.0	171.1	144.0	CRAWFORD St
4309 - 4019	6 0	106	59.0	0.0	6.5	0.0	0.0	0.0	6.5	0.0	177.6	144.0	CRAWFORD St
4019 - 2993	6 0	8	59.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	178.1	144.0	CRAWFORD St
2993 - 2992	6 0	5	59.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	178.4	144.0	CRAWFORD St
2992 - 2994	6 0	4	58.9	0.0	0.2	0.0	0.0	0.0	0.2	0.0	178.6	144.0	CRAWFORD St
2994 - 4024	6 0	10	58.9	0.0	0.6	0.0	0.0	0.0	0.6	0.0	179.2	144.0	CRAWFORD St
4024 - 4443	6 0	82	58.9	0.0	5.0	0.0	0.0	0.0	5.0	0.0	184.3	144.0	CRAWFORD St
4443 - 4027	6 0	120	58.9	0.0	7.3	0.0	0.0	0.0	7.3	0.0	191.6	144.0	CRAWFORD St
4027 - 2996	6 0	14	58.9	0.0	0.9	0.0	0.0	0.0	0.9	0.0	192.4	144.0	CRAWFORD ST
2996 - 2995	6 0	6	58.9	0.5	0.4	40.0	0.0	0.0	0.4	40.0	192.8	184.0	CRAWFORD ST
2995 - 2997	6 0	6	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	193.2	184.0	CRAWFORD ST
2997 - 4025	6 0	19	58.4	0.0	1.2	0.0	0.0	0.0	1.2	0.0	194.4	184.0	CRAWFORD ST
4025 - 3000	6 0	70	58.4	0.0	4.3	0.0	0.0	0.0	4.3	0.0	198.7	184.0	CRAWFORD ST
3000 - 3093	6 0	7	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	199.1	184.0	CRAWFORD ST
3093 - 3092	6 0	4	58.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	199.3	184.0	CRAWFORD ST
3092 - 3094	6 0	4	58.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	199.6	184.0	CRAWFORD ST
3094 - 2998	6 0	7	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	200.0	184.0	CRAWFORD ST
2998 - 3256	6 0	116	58.4	0.0	7.2	0.0	2.4	0.0	9.6	0.0	209.6	184.0	CRAWFORD
3256 - 2451	6 0	61	56.9	0.0	3.9	0.0	0.0	0.0	3.9	0.0	213.4	184.0	URIARRA Rd
2451 - 3259	6 0	72	57.3	0.0	4.5	0.0	0.7	0.0	5.2	0.0	218.7	184.0	URIARRA Rd
3259 - 3020	6 0	6	57.3	0.9	0.4	24.0	0.0	0.0	0.4	24.0	219.0	208.0	URIARRA Rd
3020 - 4057	6 0	228	57.1	0.0	14.4	0.0	0.0	0.0	14.4	0.0	233.4	208.0	URIARRA Rd
4057 - 2111	5 0	13	46.7	2.8	1.0	17.0	0.0	0.0	1.0	17.0	234.4	225.0	URIARRA Rd
2111 - 4056	5 0	12	46.4	0.0	0.9	0.0	0.0	0.0	0.9	0.0	235.3	225.0	URIARRA Rd
4056 - 2771	5 0	21	46.4	0.0	1.6	0.0	0.0	0.0	1.6	0.0	237.0	225.0	URIARRA Rd

2771 - 2772	6	0	152	56.9	0.0	9.6	0.0	0.0	0.0	9.6	0.0	246.6	225.0	URIARRA Rd
2772 - 2734	6	0	75	57.0	0.0	4.7	0.0	0.0	0.0	4.7	0.0	251.3	225.0	URIARRA Rd
2734 - 2735	6	0	39	56.8	0.0	2.5	0.0	0.0	0.0	2.5	0.0	253.8	225.0	URIARRA Rd
2735 - 4058	6	0	119	56.5	0.0	7.6	0.0	0.0	0.0	7.6	0.0	261.4	225.0	URIARRA Rd
4058 - 2440	5	0	15	46.0	1.9	1.2	28.0	0.0	0.0	1.2	28.0	262.6	253.0	URIARRA Rd
2440 - 4059	5	0	10	46.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	263.3	253.0	URIARRA Rd
4059 - 2246	6	0	129	56.6	0.0	8.2	0.0	0.0	0.0	8.2	0.0	271.5	253.0	URIARRA Rd
2246 - 2179	6	0	74	56.6	0.0	4.7	0.0	0.0	0.0	4.7	0.0	276.2	253.0	URIARRA Rd
2179 - 2416	6	0	142	56.3	0.0	9.1	0.0	0.0	0.0	9.1	0.0	285.3	253.0	URIARRA Rd
2416 - 2773	6	0	82	56.1	0.0	5.3	0.0	0.0	0.0	5.3	0.0	290.6	253.0	URIARRA Rd
2773 - 2774	6	0	90	56.1	0.0	5.8	0.0	0.0	0.0	5.8	0.0	296.4	253.0	URIARRA Rd
2774 - 4173	6	3	24	56.1	2.4	1.5	36.0	14.0	12.0	15.5	48.0	311.9	301.0	URIARRA Rd
4173 - 2730	6	0	25	54.7	0.0	1.6	0.0	0.0	0.0	1.6	0.0	313.6	301.0	URIARRA Rd
2730 - 2731	7	0	139	65.8	0.0	7.6	0.0	0.0	0.0	7.6	0.0	321.2	301.0	URIARRA Rd
2731 - 3021	7	0	28	65.8	0.0	1.5	0.0	0.0	0.0	1.5	0.0	322.7	301.0	URIARRA Rd
3021 - 7255	7	0	92	65.8	0.0	5.0	0.0	0.0	0.0	5.0	0.0	327.7	301.0	
7255 - 7256	7	0	52	65.8	10.4	2.8	18.0	0.0	0.0	2.8	18.0	330.6	319.0	
7256 - 8989	7	0	483	66.1	0.0	26.3	0.0	0.0	0.0	26.3	0.0	356.9	319.0	
8989 - 9001	6	2	635	55.2	30.9	41.4	74.0	13.7	0.0	55.1	74.0	412.0	393.0	

Modelled Totals	4436	38.8		285.2		126.8				412.0				
Observed Totals				0.0		392.0			0.0			392.0		

Observed Journey Time =	392.00	Implied Average Speed =	40.7
Modelled Journey Time =	411.98	Modelled Average Speed =	38.8
	105.10%		95.15%

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| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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Journey 5 Movement Analysis - times in seconds

RouteCEB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
7426 - 7289	8 0	19	76.2	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.9	0.0	
7289 - 7333	8 0	16	75.7	4.4	0.8	13.0	0.0	0.0	0.8	13.0	1.7	13.0	
7333 - 7493	8 0	84	76.8	0.0	3.9	0.0	3.8	0.0	7.7	0.0	9.4	13.0	
7493 - 7495	5 0	482	20.5	0.0	84.6	0.0	0.0	0.0	84.6	0.0	94.0	13.0	
7495 - 7334	5 4	191	47.2	0.0	14.6	0.0	7.7	0.0	22.3	0.0	116.3	13.0	
7334 - 8063	5 0	15	47.0	0.6	1.1	86.0	0.0	0.0	1.1	86.0	117.5	99.0	
8063 - 7330	8 0	19	78.6	0.0	0.9	0.0	0.0	0.0	0.9	0.0	118.3	99.0	
7330 - 4852	5 0	78	50.0	0.0	5.6	0.0	0.0	0.0	5.6	0.0	123.9	99.0	
4852 - 7496	5 2	33	50.0	0.0	2.4	0.0	0.0	0.0	2.4	0.0	126.3	99.0	
7496 - 4454	5 3	469	46.4	39.3	36.4	43.0	8.2	0.0	44.6	43.0	170.9	142.0	
4454 - 4456	5 3	679	45.8	67.9	53.4	36.0	12.5	0.0	65.9	36.0	236.8	178.0	
4456 - 9206	9 0	894	86.4	59.6	37.2	54.0	0.0	0.0	37.2	54.0	274.0	232.0	
9206 - 8281	9 0	3257	86.9	82.0	134.9	143.0	0.0	0.0	134.9	143.0	409.0	375.0	
8281 - 7329	9 0	662	87.3	0.0	27.3	0.0	0.0	0.0	27.3	0.0	436.3	375.0	
7329 - 8028	9 0	729	87.2	0.0	30.1	0.0	0.0	0.0	30.1	0.0	466.4	375.0	
8028 - 3638	8 0	141	77.0	0.0	6.6	0.0	0.0	0.0	6.6	0.0	472.9	375.0	
3638 - 4189	7 0	37	67.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	474.9	375.0	YASS Rd
4189 - 4192	6 0	6	56.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	475.3	375.0	YASS Rd
4192 - 4191	6 0	5	56.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	475.6	375.0	YASS Rd
4191 - 4193	6 0	4	58.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	475.9	375.0	YASS Rd
4193 - 4188	6 0	7	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	476.3	375.0	YASS Rd
4188 - 4233	6 0	214	58.4	0.0	13.2	0.0	0.0	0.0	13.2	0.0	489.5	375.0	YASS RD
4233 - 4236	6 0	8	58.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	490.0	375.0	YASS Rd
4236 - 4235	6 0	7	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	490.4	375.0	YASS Rd
4235 - 4237	6 0	5	58.4	0.0	0.3	0.0	0.0	0.0	0.3	0.0	490.7	375.0	YASS Rd
4237 - 4232	6 0	9	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	491.3	375.0	YASS Rd
4232 - 4226	6 0	29	58.4	0.0	1.8	0.0	0.0	0.0	1.8	0.0	493.1	375.0	YASS RD
4226 - 4229	6 0	8	58.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	493.6	375.0	YASS Rd
4229 - 4228	6 0	7	58.4	0.3	0.4	91.0	0.0	2.0	0.4	93.0	494.0	468.0	YASS Rd
4228 - 4230	6 0	6	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	494.4	468.0	YASS Rd
4230 - 4225	6 0	10	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	495.0	468.0	YASS Rd
4225 - 2798	6 0	176	58.4	0.0	10.8	0.0	0.0	0.0	10.8	0.0	505.8	468.0	YASS RD
2798 - 2893	6 0	10	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	506.5	468.0	YASS Rd
2893 - 2894	6 0	11	58.4	0.0	0.7	0.0	0.0	0.0	0.7	0.0	507.1	468.0	YASS Rd
2894 - 2892	6 0	8	58.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	507.6	468.0	YASS Rd
2892 - 2891	6 0	10	58.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	508.2	468.0	YASS Rd
2891 - 3635	6 0	173	58.3	0.0	10.7	0.0	0.0	0.0	10.7	0.0	518.9	468.0	YASS RD
3635 - 2797	6 0	6	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	519.3	468.0	YASS RD
2797 - 2792	6 0	3	58.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	519.5	468.0	YASS RD
2792 - 2795	6 0	7	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	519.9	468.0	YASS RD
2795 - 2793	6 0	11	58.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	520.6	468.0	YASS RD
2793 - 3634	6 0	70	58.5	0.0	4.3	0.0	0.0	0.0	4.3	0.0	524.9	468.0	YASS RD
3634 - 2695	6 0	73	58.5	0.0	4.5	0.0	0.0	0.0	4.5	0.0	529.4	468.0	YASS RD
2695 - 2699	6 0	12	58.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	530.1	468.0	YASS RD
2699 - 2791	6 0	6	58.5	0.5	0.4	43.0	0.0	0.0	0.4	43.0	530.5	511.0	YASS RD
2791 - 2700	15 0	5	53.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	530.8	511.0	YASS RD
2700 - 2698	15 0	13	53.6	0.0	0.9	0.0	0.0	0.0	0.9	0.0	531.7	511.0	YASS RD
2698 - 2600	15 0	206	53.6	0.0	13.8	0.0	0.0	0.0	13.8	0.0	545.5	511.0	YASS RD

2600 - 2692	15	0	17	53.6	0.0	1.1	0.0	0.0	0.0	1.1	0.0	546.7	511.0	YASS RD
2692 - 2694	15	0	11	53.6	0.0	0.7	0.0	0.0	0.0	0.7	0.0	547.4	511.0	YASS RD
2694 - 2693	15	0	9	53.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	548.0	511.0	YASS RD
2693 - 2598	15	0	18	53.6	0.0	1.2	0.0	0.0	0.0	1.2	0.0	549.2	511.0	YASS RD
2598 - 3757	15	0	28	53.6	0.0	1.9	0.0	0.0	0.0	1.9	0.0	551.1	511.0	YASS RD
3757 - 3484	15	4	114	53.6	10.8	7.7	38.0	9.0	0.0	16.7	38.0	567.8	549.0	YASS RD
3484 - 3633	6	0	22	59.0	0.0	1.3	0.0	0.0	0.0	1.3	0.0	569.1	549.0	ELLERTON DR/BUNGENDOR
3633 - 3309	6	0	7	59.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	569.5	549.0	ELLERTON DR/BUNGENDOR
3309 - 2374	6	0	20	56.8	0.0	1.3	0.0	0.0	0.0	1.3	0.0	570.8	549.0	ELLERTON DR/BUNGENDOR
2374 - 3301	6	0	8	56.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	571.3	549.0	ELLERTON DR/BUNGENDOR
3301 - 2727	6	0	20	57.6	0.0	1.2	0.0	0.0	0.0	1.2	0.0	572.6	549.0	ELLERTON DR/BUNGENDOR
2727 - 2726	6	0	178	57.6	0.0	11.1	0.0	0.0	0.0	11.1	0.0	583.7	549.0	BUNGENDORE St
2726 - 3017	6	4	215	57.6	17.6	13.4	44.0	11.7	0.0	25.1	44.0	608.8	593.0	MONARO St
3017 - 3979	6	0	10	56.8	0.0	0.6	0.0	0.0	0.0	0.6	0.0	609.5	593.0	MONARO St
3979 - 3983	6	0	19	57.9	0.0	1.2	0.0	0.0	0.0	1.2	0.0	610.7	593.0	MONARO St
3983 - 3019	6	0	13	56.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	611.5	593.0	MONARO St
3019 - 2594	6	0	50	58.1	0.0	3.1	0.0	0.0	0.0	3.1	0.0	614.6	593.0	MONARO St
2594 - 3018	15	0	265	51.5	0.0	18.5	0.0	0.0	0.0	18.5	0.0	633.1	593.0	MONARO St
3018 - 2593	15	0	198	51.5	22.3	13.8	32.0	0.0	0.0	13.8	32.0	646.9	625.0	MONARO St
2593 - 3189	15	0	18	51.5	0.0	1.3	0.0	0.0	0.0	1.3	0.0	648.2	625.0	MONARO St
3189 - 4441	15	0	43	53.0	0.0	2.9	0.0	0.0	0.0	2.9	0.0	651.1	625.0	MONARO St
4441 - 2496	15	0	95	53.0	0.0	6.5	0.0	0.0	0.0	6.5	0.0	657.6	625.0	MONARO St
2496 - 2498	15	0	9	53.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	658.2	625.0	MONARO St
2498 - 2492	15	6	6	53.0	0.6	0.4	35.0	47.0	10.0	47.4	45.0	705.6	670.0	MONARO St
2492 - 3264	14	0	5	43.7	0.0	0.4	0.0	0.0	0.0	0.4	0.0	706.0	670.0	CRAWFORD St
3264 - 2452	14	0	10	43.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	706.8	670.0	CRAWFORD St
2452 - 4478	14	0	81	43.7	0.0	6.7	0.0	0.0	0.0	6.7	0.0	713.5	670.0	CRAWFORD St
4478 - 2453	14	0	13	43.7	0.0	1.1	0.0	0.0	0.0	1.1	0.0	714.6	670.0	CRAWFORD St
2453 - 2946	5	0	103	48.7	0.0	7.6	0.0	0.0	0.0	7.6	0.0	722.2	670.0	CRAWFORD St
2946 - 4178	5	3	20	48.7	2.7	1.5	27.0	9.0	0.0	10.5	27.0	732.7	697.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	734.5	697.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	740.8	697.0	CRAWFORD ST
4319 - 4017	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	747.2	697.0	CRAWFORD ST
4017 - 2904	4	0	10	39.2	1.7	0.9	21.0	0.0	0.0	0.9	21.0	748.1	718.0	CRAWFORD ST
2904 - 4018	5	0	9	48.9	0.0	0.7	0.0	0.0	0.0	0.7	0.0	748.8	718.0	THORPE Ave
4018 - 4328	5	0	87	48.9	0.0	6.4	0.0	0.0	0.0	6.4	0.0	755.2	718.0	THORPE Ave
4328 - 4325	5	0	30	49.8	0.0	2.2	0.0	0.0	0.0	2.2	0.0	757.3	718.0	THORPE Ave
4325 - 2281	5	0	148	49.8	20.5	10.7	26.0	0.0	0.0	10.7	26.0	768.0	744.0	THORPE Ave

Modelled Totals	10997	51.5		659.1		108.9		768.0						
Observed Totals			0.0		744.0		0.0		744.0					

+++ Links with No Traffic in journey: RouteCEB

Observed Journey Time =	744.00	Implied Average Speed =	53.2
Modelled Journey Time =	768.03	Modelled Average Speed =	51.5
	103.23%		96.87%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
+-----+
    
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Journey 6 Movement Analysis - times in seconds

RouteCWB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
2281 - 4325	5 0	148	49.1	0.0	10.9	0.0	0.0	0.0	10.9	0.0	10.9	0.0	THORPE Ave
4325 - 4328	5 0	30	49.1	0.0	2.2	0.0	0.0	0.0	2.2	0.0	13.1	0.0	THORPE Ave
4328 - 4018	5 0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.4	0.0	THORPE Ave
4018 - 2904	5 0	9	49.0	1.1	0.7	29.0	0.0	0.0	0.7	29.0	20.1	29.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	21.0	29.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.3	29.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.6	29.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	4.8	1.8	15.0	9.0	0.0	10.8	15.0	44.4	44.0	CRAWFORD ST
4178 - 2946	5 0	20	48.6	0.0	1.5	0.0	0.0	0.0	1.5	0.0	45.9	44.0	CRAWFORD ST
2946 - 2453	5 0	103	48.6	0.0	7.6	0.0	2.0	0.0	9.6	0.0	55.5	44.0	CRAWFORD St
2453 - 4478	14 0	13	43.8	0.0	1.1	0.0	0.0	0.0	1.1	0.0	56.6	44.0	CRAWFORD St
4478 - 2452	14 0	81	43.8	0.0	6.7	0.0	0.0	0.0	6.7	0.0	63.3	44.0	CRAWFORD St
2452 - 3264	14 0	10	43.8	0.0	0.8	0.0	0.0	0.0	0.8	0.0	64.1	44.0	CRAWFORD St
3264 - 2492	14 7	5	43.8	0.8	0.4	24.0	77.0	39.0	77.4	63.0	141.5	107.0	CRAWFORD St
2492 - 2498	15 0	6	52.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	141.9	107.0	MONARO St
2498 - 2495	15 0	11	52.2	0.0	0.8	0.0	0.0	0.0	0.8	0.0	142.7	107.0	MONARO St
2495 - 4438	15 0	98	52.2	0.0	6.8	0.0	0.0	0.0	6.8	0.0	149.4	107.0	MONARO St
4438 - 3305	15 0	36	52.3	0.0	2.5	0.0	0.0	0.0	2.5	0.0	151.9	107.0	MONARO St
3305 - 2593	15 0	19	49.5	0.0	1.4	0.0	0.0	0.0	1.4	0.0	153.3	107.0	MONARO St
2593 - 3018	15 0	198	49.5	32.4	14.4	22.0	0.0	0.0	14.4	22.0	167.7	129.0	MONARO St
3018 - 2594	15 0	265	49.5	0.0	19.3	0.0	0.0	0.0	19.3	0.0	186.9	129.0	MONARO St
2594 - 3304	6 4	51	54.8	6.3	3.4	29.0	16.6	0.0	20.0	29.0	206.9	158.0	MONARO St
3304 - 3629	6 0	10	29.2	0.0	1.2	0.0	0.0	0.0	1.2	0.0	208.1	158.0	MONARO St
3629 - 2671	6 0	19	29.2	0.0	1.2	0.0	0.0	0.0	1.2	0.0	209.3	158.0	MONARO St
2671 - 3303	6 0	6	56.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	209.7	158.0	MONARO St
3303 - 3155	6 0	219	56.9	0.0	13.9	0.0	0.0	0.0	13.9	0.0	223.6	158.0	MONARO St
3155 - 3302	6 0	173	57.0	0.0	10.9	0.0	0.0	0.0	10.9	0.0	234.5	158.0	BUNGENDORE ST
3302 - 3308	6 4	22	57.0	2.1	1.4	38.0	17.0	0.0	18.4	38.0	252.9	196.0	ELLERTON DR/BUNGENDOR
3308 - 2599	15 0	155	52.5	0.0	10.6	0.0	0.0	0.0	10.6	0.0	263.5	196.0	YASS Rd
2599 - 2693	15 0	16	52.5	0.0	1.1	0.0	0.0	0.0	1.1	0.0	264.6	196.0	YASS RD
2693 - 2694	15 0	9	52.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	265.2	196.0	YASS RD
2694 - 2692	15 0	11	52.5	0.0	0.8	0.0	0.0	0.0	0.8	0.0	266.0	196.0	YASS RD
2692 - 2691	15 0	17	52.5	0.0	1.2	0.0	0.0	0.0	1.2	0.0	267.2	196.0	YASS RD
2691 - 2697	15 0	205	52.5	0.0	14.1	0.0	0.0	0.0	14.1	0.0	281.2	196.0	YASS Rd
2697 - 2700	15 0	12	52.5	0.0	0.8	0.0	0.0	0.0	0.8	0.0	282.0	196.0	YASS RD
2700 - 2791	15 0	5	52.5	0.4	0.3	41.0	0.0	0.0	0.3	41.0	282.4	237.0	YASS RD
2791 - 2699	6 0	6	57.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	282.8	237.0	YASS RD
2699 - 2696	6 0	13	57.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	283.6	237.0	YASS RD
2696 - 2908	6 0	72	57.3	0.0	4.5	0.0	0.0	0.0	4.5	0.0	288.1	237.0	YASS Rd
2908 - 2794	6 0	70	57.4	0.0	4.4	0.0	0.0	0.0	4.4	0.0	292.5	237.0	YASS Rd
2794 - 2795	6 0	6	57.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	292.9	237.0	YASS RD
2795 - 2792	6 0	7	57.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	293.3	237.0	YASS RD
2792 - 2797	6 0	3	57.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	293.5	237.0	YASS RD
2797 - 2796	6 0	10	57.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	294.1	237.0	YASS RD
2796 - 2800	6 0	169	57.7	0.0	10.5	0.0	0.0	0.0	10.5	0.0	304.7	237.0	YASS Rd
2800 - 2892	6 0	10	57.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	305.3	237.0	YASS Rd
2892 - 2894	6 0	8	57.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	305.8	237.0	YASS Rd
2894 - 2893	6 0	11	58.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	306.5	237.0	YASS Rd

2893 - 2799	6 0	12	58.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	307.2	237.0	YASS Rd
2799 - 4392	6 0	143	58.0	0.0	8.9	0.0	0.0	0.0	8.9	0.0	316.1	237.0	YASS Rd
4392 - 4224	6 0	32	58.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	318.1	237.0	YASS Rd
4224 - 4230	6 0	8	58.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	318.6	237.0	YASS Rd
4230 - 4228	6 0	6	58.0	0.6	0.4	39.0	0.0	2.0	0.4	41.0	318.9	278.0	YASS Rd
4228 - 4229	6 0	7	58.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	319.4	278.0	YASS Rd
4229 - 4227	6 0	9	58.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	319.9	278.0	YASS Rd
4227 - 4231	6 0	29	58.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	321.7	278.0	YASS Rd
4231 - 4237	6 0	7	58.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	322.2	278.0	YASS Rd
4237 - 4235	6 0	5	58.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	322.5	278.0	YASS Rd
4235 - 4236	6 0	7	58.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	322.9	278.0	YASS Rd
4236 - 4234	6 0	11	58.2	0.0	0.7	0.0	0.0	0.0	0.7	0.0	323.6	278.0	YASS Rd
4234 - 2897	6 0	211	58.2	0.0	13.1	0.0	0.0	0.0	13.1	0.0	336.6	278.0	YASS Rd
2897 - 4193	6 0	6	58.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	337.0	278.0	YASS Rd
4193 - 4191	6 0	4	58.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	337.2	278.0	YASS Rd
4191 - 4192	6 0	5	56.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	337.6	278.0	YASS Rd
4192 - 4190	6 0	8	56.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	338.1	278.0	YASS Rd
4190 - 3024	7 0	36	66.7	0.0	1.9	0.0	0.0	0.0	1.9	0.0	340.0	278.0	YASS Rd
3024 - 8028	8 0	139	76.7	0.0	6.5	0.0	0.0	0.0	6.5	0.0	346.5	278.0	
8028 - 7329	9 0	729	87.0	0.0	30.2	0.0	0.0	0.0	30.2	0.0	376.7	278.0	
7329 - 8281	9 0	662	86.9	26.8	27.4	89.0	0.0	0.0	27.4	89.0	404.1	367.0	
8281 - 9206	9 0	3257	85.3	78.2	137.5	150.0	0.0	0.0	137.5	150.0	541.6	517.0	
9206 - 4456	9 3	894	85.7	61.9	37.6	52.0	11.0	0.0	48.6	52.0	590.1	569.0	
4456 - 4454	5 3	679	44.4	62.7	55.1	39.0	7.0	0.0	62.1	39.0	652.2	608.0	
4454 - 7496	5 0	469	45.0	0.0	37.5	0.0	0.0	0.0	37.5	0.0	689.7	608.0	
7496 - 4852	5 0	33	49.8	0.0	2.4	0.0	0.0	0.0	2.4	0.0	692.1	608.0	
4852 - 7330	5 4	78	49.8	6.2	5.6	45.0	13.5	0.0	19.1	45.0	711.2	653.0	
7330 - 7331	8 0	35	78.5	0.0	1.6	0.0	0.0	0.0	1.6	0.0	712.9	653.0	
7331 - 4851	5 0	181	47.9	0.0	13.6	0.0	2.5	0.0	16.1	0.0	729.0	653.0	
4851 - 7494	5 2	45	46.1	0.0	3.5	0.0	9.3	0.0	12.8	0.0	741.8	653.0	
7494 - 7492	5 0	431	23.6	0.0	65.7	0.0	0.0	0.0	65.7	0.0	807.5	653.0	
7492 - 7332	8 4	85	76.9	5.3	4.0	58.0	32.0	0.0	36.0	58.0	843.5	711.0	

Modelled Totals	10885	46.5		646.6		196.9			843.5				
Observed Totals			0.0		711.0			0.0		711.0			

Observed Journey Time =	711.00	Implied Average Speed =	55.1
Modelled Journey Time =	843.49	Modelled Average Speed =	46.5
	118.63%		84.29%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 7 Movement Analysis - times in seconds

RouteDNB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
5601 - 5173	8 0	1110	77.7	0.0	51.4	0.0	0.0	0.0	51.4	0.0	51.4	0.0	THARWA RD
5173 - 2770	8 0	249	77.7	13.6	11.5	66.0	0.0	0.0	11.5	66.0	63.0	66.0	THARWA RD
2770 - 2769	7 0	58	67.7	0.0	3.1	0.0	0.0	0.0	3.1	0.0	66.0	66.0	THARWA RD
2769 - 3276	7 0	31	67.7	0.0	1.6	0.0	0.0	0.0	1.6	0.0	67.7	66.0	THARWA RD
3276 - 2096	7 4	10	67.7	1.7	0.5	21.0	15.5	0.0	16.0	21.0	83.7	87.0	THARWA RD
2096 - 3488	7 0	49	67.0	0.0	2.6	0.0	0.0	0.0	2.6	0.0	86.4	87.0	LANYON Dr
3488 - 3408	7 0	13	67.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	87.1	87.0	LANYON DR RBT
3408 - 3407	9 0	31	87.6	0.0	1.3	0.0	0.0	0.0	1.3	0.0	88.3	87.0	LANYON Dr
3407 - 2093	9 0	1549	87.6	0.0	63.7	0.0	0.0	0.0	63.7	0.0	152.0	87.0	LANYON Dr
2093 - 4145	9 0	32	87.7	0.0	1.3	0.0	0.0	0.0	1.3	0.0	153.3	87.0	LANYON Dr
4145 - 4150	9 0	7	87.7	0.0	0.3	0.0	0.0	0.0	0.3	0.0	153.6	87.0	LANYON Dr
4150 - 4149	9 0	5	87.7	0.2	0.2	89.0	0.0	0.0	0.2	89.0	153.8	176.0	LANYON Dr
4149 - 4151	9 0	6	87.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	154.0	176.0	LANYON Dr
4151 - 4146	9 0	8	87.7	0.0	0.3	0.0	0.0	0.0	0.3	0.0	154.4	176.0	LANYON Dr
4146 - 2094	9 0	8	87.7	0.0	0.3	0.0	0.0	0.0	0.3	0.0	154.7	176.0	LANYON Dr
2094 - 4140	9 0	183	87.6	0.0	7.5	0.0	0.0	0.0	7.5	0.0	162.2	176.0	LANYON Dr
4140 - 4143	9 0	10	87.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	162.6	176.0	LANYON Dr
4143 - 4142	9 0	6	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	162.9	176.0	LANYON Dr
4142 - 4144	9 0	6	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	163.1	176.0	LANYON Dr
4144 - 4141	9 0	12	87.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	163.6	176.0	LANYON Dr
4141 - 3187	9 0	14	87.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	164.2	176.0	LANYON Dr
3187 - 2092	9 0	177	87.6	0.0	7.3	0.0	0.0	0.0	7.3	0.0	171.5	176.0	LANYON Dr
2092 - 3013	9 0	225	87.6	0.0	9.2	0.0	0.0	0.0	9.2	0.0	180.7	176.0	LANYON Dr
3013 - 4131	9 0	14	87.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	181.3	176.0	LANYON DR
4131 - 4136	9 0	10	88.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	181.7	176.0	LANYON Dr
4136 - 4135	9 0	5	88.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	181.9	176.0	LANYON Dr
4135 - 4137	18 0	5	82.8	0.0	0.2	0.0	0.0	0.0	0.2	0.0	182.1	176.0	LANYON Dr
4137 - 4132	18 0	10	82.8	0.0	0.4	0.0	0.0	0.0	0.4	0.0	182.6	176.0	LANYON Dr
4132 - 4208	18 0	82	82.7	0.0	3.6	0.0	0.0	0.0	3.6	0.0	186.1	176.0	LANYON Dr
4208 - 3014	18 0	148	82.7	0.0	6.4	0.0	0.0	0.0	6.4	0.0	192.6	176.0	LANYON Dr
3014 - 3828	18 4	20	82.7	1.4	0.9	51.0	26.1	0.0	27.0	51.0	219.5	227.0	LANYON DR
3828 - 3826	8 0	38	76.4	0.0	1.8	0.0	0.0	0.0	1.8	0.0	221.3	227.0	LANYON DR RBT
3826 - 3265	6 0	20	56.1	0.0	1.3	0.0	0.0	0.0	1.3	0.0	222.6	227.0	LANYON DR
3265 - 4206	6 0	503	56.1	0.0	32.3	0.0	0.0	0.0	32.3	0.0	254.9	227.0	LANYON Dr
4206 - 4127	6 0	83	56.1	0.0	5.3	0.0	0.0	0.0	5.3	0.0	260.2	227.0	LANYON Dr
4127 - 4129	6 0	10	56.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0	260.9	227.0	LANYON Dr
4129 - 4128	6 0	6	56.1	0.6	0.4	38.0	0.0	0.0	0.4	38.0	261.2	265.0	LANYON Dr
4128 - 4130	6 0	8	56.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	261.8	265.0	LANYON Dr
4130 - 4125	6 0	12	56.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	262.5	265.0	LANYON Dr
4125 - 3250	6 4	199	56.0	34.1	12.8	21.0	42.5	19.0	55.3	40.0	317.8	305.0	LANYON Dr

Modelled Totals	4972	56.3		233.7		84.1			317.8			
Observed Totals				0.0		305.0		0.0			305.0	

Observed Journey Time = 305.00 Implied Average Speed = 58.7
 Modelled Journey Time = 317.82 Modelled Average Speed = 56.3
 104.20% 95.97%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 8 Movement Analysis - times in seconds

RouteDSB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
2987 - 2091	6 0	121	57.0	0.0	7.6	0.0	0.0	0.0	7.6	0.0	7.6	0.0	LANYON Dr
2091 - 4124	6 0	120	58.0	0.0	7.4	0.0	0.0	0.0	7.4	0.0	15.1	0.0	LANYON Dr
4124 - 4130	6 0	13	58.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	15.9	0.0	LANYON Dr
4130 - 4128	6 0	8	58.0	1.9	0.5	15.0	0.0	0.0	0.5	15.0	16.4	15.0	LANYON Dr
4128 - 4129	6 0	6	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	16.8	15.0	LANYON Dr
4129 - 4126	6 0	11	58.3	0.0	0.7	0.0	0.0	0.0	0.7	0.0	17.4	15.0	LANYON Dr
4126 - 4207	6 0	82	58.3	0.0	5.1	0.0	0.0	0.0	5.1	0.0	22.5	15.0	LANYON Dr
4207 - 3262	6 0	504	58.3	0.0	31.1	0.0	0.0	0.0	31.1	0.0	53.6	15.0	LANYON Dr
3262 - 3825	6 4	21	58.3	1.9	1.3	40.0	9.7	0.0	11.0	40.0	64.6	55.0	LANYON DR
3825 - 3823	8 0	10	78.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	65.1	55.0	LANYON DR RBT
3823 - 3824	8 0	17	78.9	0.0	0.8	0.0	0.0	0.0	0.8	0.0	65.9	55.0	LANYON DR RBT
3824 - 3827	8 0	8	77.1	0.0	0.4	0.0	0.0	0.0	0.4	0.0	66.2	55.0	LANYON DR RBT
3827 - 2767	18 0	21	83.3	0.0	0.9	0.0	0.0	0.0	0.9	0.0	67.1	55.0	LANYON DR
2767 - 4209	18 0	147	83.3	0.0	6.4	0.0	0.0	0.0	6.4	0.0	73.5	55.0	LANYON Dr
4209 - 4133	18 0	82	83.3	0.0	3.5	0.0	0.0	0.0	3.5	0.0	77.0	55.0	LANYON Dr
4133 - 4137	18 0	12	83.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	77.6	55.0	LANYON Dr
4137 - 4135	18 0	5	83.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	77.8	55.0	LANYON Dr
4135 - 4136	9 0	5	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	78.0	55.0	LANYON Dr
4136 - 4134	9 0	8	88.5	0.0	0.3	0.0	0.0	0.0	0.3	0.0	78.3	55.0	LANYON Dr
4134 - 2768	9 0	25	88.5	0.0	1.0	0.0	0.0	0.0	1.0	0.0	79.3	55.0	LANYON Dr
2768 - 3188	9 0	412	88.5	0.0	16.8	0.0	0.0	0.0	16.8	0.0	96.1	55.0	LANYON Dr
3188 - 4144	9 0	11	88.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	96.5	55.0	LANYON Dr
4144 - 4142	9 0	6	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	96.8	55.0	LANYON Dr
4142 - 4143	9 0	6	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	97.0	55.0	LANYON Dr
4143 - 4139	9 0	11	88.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	97.5	55.0	LANYON Dr
4139 - 4147	9 0	187	88.5	0.0	7.6	0.0	0.0	0.0	7.6	0.0	105.1	55.0	-- no name --
4147 - 4151	9 0	10	88.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	105.5	55.0	LANYON Dr
4151 - 4149	9 0	6	88.5	0.4	0.2	53.0	0.0	0.0	0.2	53.0	105.7	108.0	LANYON Dr
4149 - 4150	9 0	5	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	105.9	108.0	LANYON Dr
4150 - 4148	9 0	9	88.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	106.3	108.0	LANYON Dr
4148 - 3409	9 0	1571	88.5	0.0	63.9	0.0	0.0	0.0	63.9	0.0	170.2	108.0	LANYON Dr
3409 - 3410	9 0	42	88.7	0.0	1.7	0.0	0.0	0.0	1.7	0.0	171.9	108.0	LANYON Dr
3410 - 3485	7 4	9	68.7	0.4	0.5	84.0	9.8	0.0	10.3	84.0	182.2	192.0	LANYON Dr
3485 - 2097	7 0	7	68.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	182.5	192.0	LANYON Dr
2097 - 3486	7 0	17	68.8	0.0	0.9	0.0	0.0	0.0	0.9	0.0	183.4	192.0	LANYON Dr
3486 - 2098	7 0	17	68.8	0.0	0.9	0.0	0.0	0.0	0.9	0.0	184.3	192.0	LANYON Dr
2098 - 2095	7 0	16	66.3	0.0	0.9	0.0	0.0	0.0	0.9	0.0	185.2	192.0	LANYON Dr
2095 - 3276	7 0	9	66.9	0.0	0.5	0.0	0.0	0.0	0.5	0.0	185.7	192.0	THARWA RD
3276 - 2769	7 0	31	66.9	0.0	1.7	0.0	0.0	0.0	1.7	0.0	187.3	192.0	THARWA RD
2769 - 2770	7 0	58	66.9	0.0	3.1	0.0	0.0	0.0	3.1	0.0	190.5	192.0	THARWA RD
2770 - 5173	8 0	249	76.9	40.7	11.7	22.0	0.0	0.0	11.7	22.0	202.1	214.0	THARWA RD
5173 - 5601	8 0	1110	76.9	64.5	52.0	62.0	1.2	0.0	53.2	62.0	255.3	276.0	THARWA RD

Modelled Totals	5025	70.9	234.6	20.7	255.3
Observed Totals			0.0	276.0	0.0
					276.0

Observed Journey Time =	276.00	Implied Average Speed =	65.5
Modelled Journey Time =	255.28	Modelled Average Speed =	70.9
	92.49%		108.12%

JURNEY terminated successfully

EVENING PEAK

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| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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| TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS TR |
| TRACKS +-----+ TRACKS |
| S TRACKS|                                     |S TRACKS |
| KS TRACK| Program :      JURNEY |KS TRACK |
| CKS TRAC| Version :      V7.03 |CKS TRAC |
| ACKS TRA|                                     |ACKS TRA |
| RACKS TR| Date run : 29-JAN-13 |RACKS TR |
| TRACKS T| Time run : 16:32:01 |TRACKS T |
| TRACKS | Platform : Win 95/NT | TRACKS |
| S TRACKS+-----+S TRACKS |
| KS TRACKS TRACKS TRACKS TRACKS TRACKS TRACKS |
+-----+
|                                     |
| TRACKS Licenced to |
| Gabites Porter |
| at : Christchurch, N.Z. |
+-----+
|
| Parameter version : V5.20
|
+-----+

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JURNEY Data File : JURNEY.PMP
Loaded Network   : QE11NL.000
*QUEANBEYAN PMP 2011 ALL
                    16400 Links in network

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| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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Journey 1 Movement Analysis - times in seconds

RouteAEB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
10272 - 10274	15 0	5	51.9	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	
10274 - 10270	15 0	9	51.9	0.0	0.6	0.0	0.0	0.0	0.6	0.0	1.0	0.0	
10270 - 10260	15 0	81	51.9	0.0	5.6	0.0	0.0	0.0	5.6	0.0	6.6	0.0	
10260 - 10266	15 0	9	51.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	7.2	0.0	
10266 - 10265	15 6	5	51.6	3.0	0.3	6.0	19.0	17.0	19.3	23.0	26.6	23.0	
10265 - 10267	16 0	5	62.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	26.9	23.0	
10267 - 10261	16 0	9	62.8	0.0	0.5	0.0	0.0	0.0	0.5	0.0	27.4	23.0	
10261 - 4511	16 0	405	62.3	0.0	23.4	0.0	0.0	0.0	23.4	0.0	50.8	23.0	
4511 - 6394	16 0	173	62.3	0.0	10.0	0.0	0.0	0.0	10.0	0.0	60.8	23.0	
6394 - 4510	16 0	82	62.3	0.0	4.7	0.0	0.0	0.0	4.7	0.0	65.5	23.0	
4510 - 4513	16 0	288	62.3	0.0	16.6	0.0	0.0	0.0	16.6	0.0	82.1	23.0	
4513 - 6643	16 0	546	62.1	0.0	31.7	0.0	0.0	0.0	31.7	0.0	113.8	23.0	
6643 - 6645	16 0	13	62.1	0.0	0.8	0.0	0.0	0.0	0.8	0.0	114.6	23.0	
6645 - 6655	16 7	9	62.1	0.4	0.5	82.0	68.0	39.0	68.5	121.0	183.1	144.0	
6655 - 6651	8 0	11	76.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	183.6	144.0	
6651 - 6649	8 0	12	76.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	184.2	144.0	
6649 - 6399	8 0	1987	74.1	0.0	96.5	0.0	0.0	0.0	96.5	0.0	280.7	144.0	
6399 - 6400	8 0	118	74.1	0.0	5.7	0.0	0.0	0.0	5.7	0.0	286.4	144.0	
6400 - 6401	8 6	40	74.1	1.3	1.9	109.0	19.0	0.0	20.9	109.0	307.4	253.0	
6401 - 6402	8 0	47	76.0	0.0	2.2	0.0	0.0	0.0	2.2	0.0	309.6	253.0	
6402 - 6403	8 0	73	76.0	0.0	3.5	0.0	0.0	0.0	3.5	0.0	313.1	253.0	
6403 - 8990	8 0	538	76.0	0.0	25.5	0.0	0.0	0.0	25.5	0.0	338.5	253.0	
8990 - 2990	8 0	300	77.5	0.0	13.9	0.0	0.0	0.0	13.9	0.0	352.5	253.0	
2990 - 2296	16 0	31	62.6	0.0	1.8	0.0	0.0	0.0	1.8	0.0	354.3	253.0	CANBERRA Ave
2296 - 2297	16 0	18	61.5	0.0	1.1	0.0	0.0	0.0	1.1	0.0	355.3	253.0	CANBERRA Ave
2297 - 2292	16 7	4	61.5	0.4	0.2	39.0	9.0	4.0	9.2	43.0	364.6	296.0	CANBERRA Ave
2292 - 2298	16 0	5	61.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	364.8	296.0	CANBERRA Ave
2298 - 2294	16 0	21	61.8	0.0	1.2	0.0	0.0	0.0	1.2	0.0	366.1	296.0	CANBERRA Ave
2294 - 4104	16 0	235	62.7	0.0	13.5	0.0	0.0	0.0	13.5	0.0	379.6	296.0	CANBERRA Ave
4104 - 4109	16 0	11	61.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	380.2	296.0	CANBERRA Ave
4109 - 4107	16 0	4	61.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	380.4	296.0	CANBERRA Ave
4107 - 4108	16 0	5	61.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	380.7	296.0	CANBERRA Ave
4108 - 4105	16 0	8	61.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	381.2	296.0	CANBERRA Ave
4105 - 4111	16 0	154	61.3	0.0	9.0	0.0	0.0	0.0	9.0	0.0	390.2	296.0	CANBERRA Ave
4111 - 4115	16 0	11	61.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	390.9	296.0	CANBERRA Ave
4115 - 4114	16 0	5	61.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	391.2	296.0	CANBERRA Ave
4114 - 4116	16 0	5	61.5	0.0	0.3	0.0	0.0	0.0	0.3	0.0	391.5	296.0	CANBERRA Ave
4116 - 4112	16 0	11	61.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	392.1	296.0	CANBERRA Ave
4112 - 3280	7 0	743	66.4	0.0	40.3	0.0	0.0	0.0	40.3	0.0	432.4	296.0	CANBERRA Ave
3280 - 2732	7 0	116	67.6	6.4	6.2	65.0	0.0	0.0	6.2	65.0	438.6	361.0	CANBERRA Ave
2732 - 2733	7 0	80	67.6	0.0	4.3	0.0	0.0	0.0	4.3	0.0	442.8	361.0	CANBERRA Ave
2733 - 3283	7 0	50	66.9	0.0	2.7	0.0	0.0	0.0	2.7	0.0	445.5	361.0	CANBERRA Ave
3283 - 2195	7 0	552	66.9	0.0	29.7	0.0	0.0	0.0	29.7	0.0	475.2	361.0	CANBERRA Ave
2195 - 2197	7 0	16	68.1	0.0	0.8	0.0	0.0	0.0	0.8	0.0	476.1	361.0	CANBERRA Ave
2197 - 2200	7 6	3	68.1	0.3	0.2	43.0	16.0	18.0	16.2	61.0	492.2	422.0	CANBERRA Ave
2200 - 2198	7 0	3	67.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	492.4	422.0	CANBERRA Ave
2198 - 2196	7 0	17	67.4	0.0	0.9	0.0	0.0	0.0	0.9	0.0	493.3	422.0	CANBERRA Ave
2196 - 3285	7 0	85	67.4	0.0	4.5	0.0	0.0	0.0	4.5	0.0	497.8	422.0	CANBERRA Ave

3285 - 2193	7	0	98	67.4	0.0	5.2	0.0	0.0	0.0	5.2	0.0	503.1	422.0	CANBERRA Ave
2193 - 2394	7	0	12	68.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	503.7	422.0	CANBERRA Ave
2394 - 2395	7	6	5	68.2	1.0	0.3	18.0	7.0	0.0	7.3	18.0	511.0	440.0	CANBERRA Ave
2395 - 2396	7	0	5	68.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	511.2	440.0	CANBERRA Ave
2396 - 2392	7	0	11	68.6	0.0	0.6	0.0	0.0	0.0	0.6	0.0	511.8	440.0	CANBERRA Ave
2392 - 3287	7	0	114	68.6	0.0	6.0	0.0	0.0	0.0	6.0	0.0	517.8	440.0	CANBERRA Ave
3287 - 4120	7	0	136	68.6	0.0	7.1	0.0	0.0	0.0	7.1	0.0	524.9	440.0	CANBERRA Ave
4120 - 4122	7	0	6	68.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	525.3	440.0	CANBERRA Ave
4122 - 4121	7	0	4	68.6	0.8	0.2	19.0	0.0	0.0	0.2	19.0	525.5	459.0	CANBERRA Ave
4121 - 4123	7	0	4	68.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	525.7	459.0	FARRER Pl
4123 - 4117	7	0	9	68.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	526.1	459.0	FARRER Pl
4117 - 3836	7	0	11	68.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	526.7	459.0	-- no name --
3836 - 3289	7	0	14	68.2	0.0	0.7	0.0	0.0	0.0	0.7	0.0	527.5	459.0	FARRER Pl
3289 - 3835	7	0	15	68.2	0.0	0.8	0.0	0.0	0.0	0.8	0.0	528.3	459.0	FARRER Pl
3835 - 4311	7	0	182	68.1	0.0	9.6	0.0	0.0	0.0	9.6	0.0	537.9	459.0	FARRER Pl
4311 - 3290	7	0	137	68.1	0.0	7.2	0.0	0.0	0.0	7.2	0.0	545.1	459.0	FARRER Pl
3290 - 2400	7	0	34	68.1	0.0	1.8	0.0	0.0	0.0	1.8	0.0	546.9	459.0	FARRER Pl
2400 - 2399	16	6	7	63.3	0.6	0.4	40.0	12.0	19.0	12.4	59.0	559.3	518.0	FARRER Pl
2399 - 2491	15	0	8	53.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	559.9	518.0	MONARO St
2491 - 2397	15	0	26	53.4	0.0	1.8	0.0	0.0	0.0	1.8	0.0	561.6	518.0	MONARO St
2397 - 4439	15	0	85	53.3	0.0	5.7	0.0	0.0	0.0	5.7	0.0	567.3	518.0	MONARO St
4439 - 2493	15	0	99	53.3	0.0	6.7	0.0	0.0	0.0	6.7	0.0	574.0	518.0	MONARO St
2493 - 2497	15	0	12	53.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	574.8	518.0	MONARO St
2497 - 2492	15	6	5	53.3	0.4	0.3	47.0	74.0	74.0	74.3	121.0	649.2	639.0	MONARO St
2492 - 3264	14	0	5	42.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	649.6	639.0	CRAWFORD St
3264 - 2452	14	0	10	42.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	650.4	639.0	CRAWFORD St
2452 - 4478	14	0	81	42.6	0.0	6.8	0.0	0.0	0.0	6.8	0.0	657.3	639.0	CRAWFORD St
4478 - 2453	14	0	13	42.6	0.0	1.1	0.0	0.0	0.0	1.1	0.0	658.4	639.0	CRAWFORD St
2453 - 2946	5	0	103	47.6	0.0	7.8	0.0	0.0	0.0	7.8	0.0	666.2	639.0	CRAWFORD St
2946 - 4178	5	3	20	47.6	2.8	1.5	26.0	8.0	0.0	9.5	26.0	675.7	665.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	677.5	665.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	683.9	665.0	CRAWFORD ST
4319 - 4017	4	0	69	39.3	0.0	6.3	0.0	0.0	0.0	6.3	0.0	690.2	665.0	CRAWFORD ST
4017 - 2904	4	0	10	39.3	2.0	0.9	18.0	0.0	0.0	0.9	18.0	691.1	683.0	CRAWFORD ST
2904 - 4018	5	0	9	49.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	691.8	683.0	THORPE Ave
4018 - 4328	5	0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	698.2	683.0	THORPE Ave
4328 - 4325	5	0	30	49.2	0.0	2.2	0.0	0.0	0.0	2.2	0.0	700.4	683.0	THORPE Ave
4325 - 2281	5	0	148	49.2	21.3	10.8	25.0	0.0	0.0	10.8	25.0	711.2	708.0	THORPE Ave

Modelled Totals	8671	43.9	479.2	232.0	711.2
Observed Totals		0.0	707.0	0.0	707.0

Observed Journey Time =	707.00	Implied Average Speed =	44.2
Modelled Journey Time =	711.18	Modelled Average Speed =	43.9
	100.59%		99.41%


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+-----+
| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 2 Movement Analysis - times in seconds

RouteAWB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
2281 - 4325	5 0	148	49.7	0.0	10.7	0.0	0.0	0.0	10.7	0.0	10.7	0.0	THORPE Ave
4325 - 4328	5 0	30	49.7	0.0	2.2	0.0	0.0	0.0	2.2	0.0	12.9	0.0	THORPE Ave
4328 - 4018	5 0	87	49.1	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.3	0.0	THORPE Ave
4018 - 2904	5 0	9	49.1	1.2	0.7	27.0	0.0	0.0	0.7	27.0	19.9	27.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	20.8	27.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.1	27.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.4	27.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	4.8	1.8	15.0	11.0	0.0	12.8	15.0	46.2	42.0	CRAWFORD ST
4178 - 2946	5 0	20	49.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	47.7	42.0	CRAWFORD ST
2946 - 2453	5 0	103	49.0	0.0	7.6	0.0	2.0	0.0	9.6	0.0	57.3	42.0	CRAWFORD St
2453 - 4478	14 0	13	44.1	0.0	1.1	0.0	0.0	0.0	1.1	0.0	58.3	42.0	CRAWFORD St
4478 - 2452	14 0	81	44.0	0.0	6.6	0.0	0.0	0.0	6.6	0.0	65.0	42.0	CRAWFORD St
2452 - 3264	14 0	10	44.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	65.8	42.0	CRAWFORD St
3264 - 2492	14 7	5	44.0	0.7	0.4	27.0	74.0	17.0	74.4	44.0	140.2	86.0	CRAWFORD St
2492 - 2497	15 0	5	52.4	0.0	0.3	0.0	0.0	0.0	0.3	0.0	140.5	86.0	MONARO St
2497 - 2494	15 0	14	52.4	0.0	1.0	0.0	0.0	0.0	1.0	0.0	141.5	86.0	MONARO St
2494 - 4440	15 0	92	52.4	0.0	6.3	0.0	0.0	0.0	6.3	0.0	147.8	86.0	MONARO St
4440 - 2398	15 0	91	52.4	0.0	6.3	0.0	0.0	0.0	6.3	0.0	154.1	86.0	MONARO St
2398 - 2491	15 0	26	52.3	0.0	1.8	0.0	0.0	0.0	1.8	0.0	155.9	86.0	MONARO St
2491 - 2399	15 6	8	52.3	0.7	0.6	41.0	13.0	13.0	13.6	54.0	169.4	140.0	MONARO St
2399 - 2400	16 0	7	62.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	169.8	140.0	FARRER Pl
2400 - 3183	7 0	33	67.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	171.6	140.0	FARRER Pl
3183 - 4317	7 0	72	67.2	0.0	3.9	0.0	0.0	0.0	3.9	0.0	175.4	140.0	FARRER Pl
4317 - 2989	7 0	265	67.2	0.0	14.2	0.0	0.0	0.0	14.2	0.0	189.6	140.0	FARRER Pl
2989 - 4118	7 0	27	67.2	0.0	1.4	0.0	0.0	0.0	1.4	0.0	191.1	140.0	FARRER Pl
4118 - 4123	7 0	6	67.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	191.4	140.0	FARRER Pl
4123 - 4121	7 0	4	67.2	0.5	0.2	28.0	0.0	0.0	0.2	28.0	191.6	168.0	FARRER Pl
4121 - 4122	7 0	4	67.1	0.0	0.2	0.0	0.0	0.0	0.2	0.0	191.8	168.0	CANBERRA Ave
4122 - 4119	7 0	10	67.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	192.4	168.0	CANBERRA Ave
4119 - 2738	7 0	139	67.1	0.0	7.5	0.0	0.0	0.0	7.5	0.0	199.8	168.0	CANBERRA Ave
2738 - 2393	7 0	110	67.1	0.0	5.9	0.0	0.0	0.0	5.9	0.0	205.7	168.0	CANBERRA Ave
2393 - 2396	7 0	9	67.9	0.0	0.5	0.0	0.0	0.0	0.5	0.0	206.2	168.0	CANBERRA Ave
2396 - 2395	7 6	5	67.9	1.0	0.3	18.0	7.0	26.0	7.3	44.0	213.5	212.0	CANBERRA Ave
2395 - 2394	7 0	5	67.2	0.0	0.3	0.0	0.0	0.0	0.3	0.0	213.7	212.0	CANBERRA Ave
2394 - 2391	7 0	12	67.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	214.4	212.0	CANBERRA Ave
2391 - 2736	7 0	99	67.2	0.0	5.3	0.0	0.0	0.0	5.3	0.0	219.7	212.0	CANBERRA Ave
2736 - 2099	7 0	83	68.1	0.0	4.4	0.0	0.0	0.0	4.4	0.0	224.1	212.0	CANBERRA Ave
2099 - 2198	7 0	16	68.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	224.9	212.0	CANBERRA Ave
2198 - 2200	7 6	3	68.3	0.5	0.2	22.0	16.0	0.0	16.2	22.0	241.1	234.0	CANBERRA Ave
2200 - 2197	7 0	3	67.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	241.2	234.0	CANBERRA Ave
2197 - 2191	7 0	15	67.4	0.0	0.8	0.0	0.0	0.0	0.8	0.0	242.0	234.0	CANBERRA Ave
2191 - 2987	7 0	621	67.1	0.0	33.3	0.0	0.0	0.0	33.3	0.0	275.4	234.0	CANBERRA Ave
2987 - 2988	16 4	53	64.3	3.9	3.0	49.0	13.9	0.0	16.9	49.0	292.2	283.0	CANBERRA Ave
2988 - 3015	6 0	10	57.2	0.0	0.6	0.0	0.0	0.0	0.6	0.0	292.9	283.0	CANBERRA Ave
3015 - 3250	6 0	35	58.9	0.0	2.1	0.0	0.5	0.0	2.6	0.0	295.5	283.0	CANBERRA Ave
3250 - 4113	7 0	853	68.1	0.0	45.1	0.0	0.0	0.0	45.1	0.0	340.6	283.0	CANBERRA Ave
4113 - 4116	16 0	9	63.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	341.1	283.0	CANBERRA Ave
4116 - 4114	16 0	5	63.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	341.4	283.0	CANBERRA Ave

4114 - 4115	16	0	5	63.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	341.7	283.0	CANBERRA Ave
4115 - 4110	16	0	11	63.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	342.3	283.0	CANBERRA Ave
4110 - 4106	16	0	159	63.3	0.0	9.0	0.0	0.0	0.0	9.0	0.0	351.3	283.0	CANBERRA Ave
4106 - 4108	16	0	8	63.3	0.0	0.5	0.0	0.0	0.0	0.5	0.0	351.8	283.0	CANBERRA Ave
4108 - 4107	16	0	5	63.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	352.1	283.0	CANBERRA Ave
4107 - 4109	16	0	4	63.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	352.3	283.0	CANBERRA Ave
4109 - 4103	16	0	9	63.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	352.8	283.0	CANBERRA Ave
4103 - 2293	16	0	240	63.4	0.0	13.6	0.0	0.0	0.0	13.6	0.0	366.4	283.0	CANBERRA Ave
2293 - 2298	16	0	20	63.4	0.0	1.1	0.0	0.0	0.0	1.1	0.0	367.6	283.0	CANBERRA Ave
2298 - 2292	16	7	5	63.4	0.2	0.3	76.0	7.0	26.0	7.3	102.0	374.9	385.0	CANBERRA Ave
2292 - 2297	16	0	4	63.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	375.1	385.0	CANBERRA Ave
2297 - 2295	16	0	18	63.5	0.0	1.0	0.0	0.0	0.0	1.0	0.0	376.1	385.0	CANBERRA Ave
2295 - 2741	16	0	29	63.8	0.0	1.6	0.0	0.0	0.0	1.6	0.0	377.7	385.0	CANBERRA Ave
2741 - 4451	8	0	300	78.6	0.0	13.7	0.0	1.8	0.0	15.5	0.0	393.3	385.0	
4451 - 9001	8	0	323	78.0	0.0	14.9	0.0	0.0	0.0	14.9	0.0	408.2	385.0	
9001 - 6404	8	0	184	77.7	0.0	8.5	0.0	0.0	0.0	8.5	0.0	416.7	385.0	
6404 - 6402	8	0	76	77.7	0.0	3.5	0.0	0.0	0.0	3.5	0.0	420.2	385.0	
6402 - 6401	8	6	47	77.7	4.2	2.2	40.0	15.0	5.0	17.2	45.0	437.4	430.0	
6401 - 6400	8	0	40	77.8	0.0	1.9	0.0	0.0	0.0	1.9	0.0	439.3	430.0	
6400 - 6398	8	0	125	77.8	0.0	5.8	0.0	2.0	0.0	7.8	0.0	447.0	430.0	
6398 - 6650	8	0	2013	76.7	0.0	94.5	0.0	0.0	0.0	94.5	0.0	541.5	430.0	
6650 - 6651	8	0	15	78.2	0.0	0.7	0.0	0.0	0.0	0.7	0.0	542.2	430.0	
6651 - 6655	8	7	11	78.2	0.4	0.5	113.0	54.0	33.0	54.5	146.0	596.7	576.0	
6655 - 6645	16	0	9	64.1	0.0	0.5	0.0	0.0	0.0	0.5	0.0	597.2	576.0	
6645 - 6644	16	0	15	64.1	0.0	0.8	0.0	0.0	0.0	0.8	0.0	598.1	576.0	
6644 - 4514	16	0	545	64.0	0.0	30.7	0.0	0.0	0.0	30.7	0.0	628.7	576.0	
4514 - 6395	16	0	286	64.0	0.0	16.1	0.0	0.0	0.0	16.1	0.0	644.8	576.0	
6395 - 4512	16	0	254	63.6	0.0	14.4	0.0	0.0	0.0	14.4	0.0	659.2	576.0	
4512 - 10262	16	0	408	63.2	0.0	23.2	0.0	0.0	0.0	23.2	0.0	682.4	576.0	
10262 - 10267	16	0	9	63.9	0.0	0.5	0.0	0.0	0.0	0.5	0.0	682.9	576.0	
10267 - 10265	16	6	5	63.9	0.2	0.3	87.0	17.0	45.0	17.3	132.0	700.2	708.0	
10265 - 10266	15	0	5	52.5	0.0	0.3	0.0	0.0	0.0	0.3	0.0	700.6	708.0	
10266 - 10259	15	0	9	52.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	701.2	708.0	
10259 - 10271	15	0	79	52.5	0.0	5.4	0.0	0.0	0.0	5.4	0.0	706.6	708.0	
10271 - 10274	15	0	10	52.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	707.3	708.0	
10274 - 10272	15	6	5	52.5	2.0	0.3	9.0	10.6	0.0	10.9	9.0	718.2	717.0	
Modelled Totals	8713	43.7		473.4		244.8			718.2					
Observed Totals			0.0		716.0			0.0		716.0				
Observed Journey Time =	716.00			Implied Average Speed =	43.8									
Modelled Journey Time =	718.23			Modelled Average Speed =	43.7									
	100.31%				99.69%									

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 3 Movement Analysis - times in seconds

RouteBEB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
8990 - 8989	7 0	262	65.7	0.0	14.4	0.0	0.0	0.0	14.4	0.0	14.4	0.0	
8989 - 7256	7 0	483	65.7	0.0	26.5	0.0	0.0	0.0	26.5	0.0	40.8	0.0	
7256 - 7255	7 0	52	64.7	0.0	2.9	0.0	0.0	0.0	2.9	0.0	43.7	0.0	
7255 - 3021	7 0	92	64.7	0.0	5.1	0.0	0.0	0.0	5.1	0.0	48.8	0.0	
3021 - 2731	7 0	28	64.7	0.0	1.6	0.0	0.0	0.0	1.6	0.0	50.4	0.0	URIARRA Rd
2731 - 2730	7 0	139	64.7	0.0	7.7	0.0	0.0	0.0	7.7	0.0	58.1	0.0	URIARRA Rd
2730 - 4173	6 3	25	52.1	1.1	1.7	84.0	17.0	0.0	18.7	84.0	76.9	84.0	URIARRA Rd
4173 - 2774	6 0	24	55.1	0.0	1.6	0.0	0.0	0.0	1.6	0.0	78.4	84.0	URIARRA Rd
2774 - 2773	6 0	90	55.1	0.0	5.9	0.0	0.0	0.0	5.9	0.0	84.3	84.0	URIARRA Rd
2773 - 2416	6 0	82	55.6	0.0	5.3	0.0	0.0	0.0	5.3	0.0	89.6	84.0	URIARRA Rd
2416 - 2179	6 0	142	55.3	0.0	9.2	0.0	0.0	0.0	9.2	0.0	98.9	84.0	URIARRA Rd
2179 - 2246	6 0	74	55.2	0.0	4.8	0.0	0.0	0.0	4.8	0.0	103.7	84.0	URIARRA Rd
2246 - 4059	6 0	129	55.3	0.0	8.4	0.0	0.0	0.0	8.4	0.0	112.1	84.0	URIARRA Rd
4059 - 2440	5 0	10	44.7	0.9	0.8	40.0	0.0	0.0	0.8	40.0	112.9	124.0	URIARRA Rd
2440 - 4058	5 0	15	45.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	114.1	124.0	URIARRA Rd
4058 - 2735	6 0	119	55.6	0.0	7.7	0.0	0.0	0.0	7.7	0.0	121.8	124.0	URIARRA Rd
2735 - 2734	6 0	39	55.7	0.0	2.5	0.0	0.0	0.0	2.5	0.0	124.3	124.0	URIARRA Rd
2734 - 2772	6 0	75	55.9	0.0	4.8	0.0	0.0	0.0	4.8	0.0	129.1	124.0	URIARRA Rd
2772 - 2771	6 0	152	55.7	0.0	9.8	0.0	0.0	0.0	9.8	0.0	139.0	124.0	URIARRA Rd
2771 - 4056	5 0	21	44.9	0.0	1.7	0.0	0.0	0.0	1.7	0.0	140.6	124.0	URIARRA Rd
4056 - 2111	5 0	12	44.9	1.4	1.0	31.0	0.0	0.0	1.0	31.0	141.6	155.0	URIARRA Rd
2111 - 4057	5 0	13	45.4	0.0	1.0	0.0	0.0	0.0	1.0	0.0	142.6	155.0	URIARRA Rd
4057 - 3020	6 0	228	56.0	48.3	14.7	17.0	0.0	0.0	14.7	17.0	157.3	172.0	URIARRA Rd
3020 - 3259	6 0	6	56.1	0.0	0.4	0.0	0.0	0.0	0.4	0.0	157.7	172.0	URIARRA Rd
3259 - 2451	6 0	72	56.1	0.0	4.6	0.0	0.0	0.0	4.6	0.0	162.3	172.0	URIARRA Rd
2451 - 2759	6 0	62	56.3	0.0	4.0	0.0	0.0	0.0	4.0	0.0	166.3	172.0	URIARRA Rd
2759 - 2999	6 0	117	56.5	0.0	7.5	0.0	0.0	0.0	7.5	0.0	173.7	172.0	CRAWFORD St
2999 - 3094	6 0	7	58.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	174.2	172.0	CRAWFORD ST
3094 - 3092	6 0	4	56.5	0.0	0.3	0.0	0.0	0.0	0.3	0.0	174.4	172.0	CRAWFORD ST
3092 - 3093	6 0	4	56.4	0.0	0.3	0.0	0.0	0.0	0.3	0.0	174.7	172.0	CRAWFORD ST
3093 - 3091	6 0	7	56.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	175.1	172.0	CRAWFORD ST
3091 - 2959	6 0	46	56.4	0.0	2.9	0.0	0.0	0.0	2.9	0.0	178.0	172.0	CRAWFORD ST
2959 - 3182	6 0	26	55.3	0.0	1.7	0.0	0.0	0.0	1.7	0.0	179.7	172.0	CRAWFORD ST
3182 - 2997	6 0	19	55.3	0.0	1.2	0.0	0.0	0.0	1.2	0.0	181.0	172.0	CRAWFORD ST
2997 - 2995	6 0	6	55.3	0.8	0.4	27.0	0.0	0.0	0.4	27.0	181.4	199.0	CRAWFORD ST
2995 - 2996	6 0	6	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	181.7	199.0	CRAWFORD ST
2996 - 4026	6 0	9	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	182.3	199.0	CRAWFORD ST
4026 - 4434	6 0	106	58.4	0.0	6.5	0.0	0.0	0.0	6.5	0.0	188.8	199.0	CRAWFORD St
4434 - 4292	6 0	51	58.4	0.0	3.1	0.0	0.0	0.0	3.1	0.0	192.0	199.0	CRAWFORD St
4292 - 4023	6 0	49	58.3	0.0	3.0	0.0	0.0	0.0	3.0	0.0	195.0	199.0	CRAWFORD St
4023 - 2994	6 0	10	58.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	195.6	199.0	CRAWFORD St
2994 - 2992	6 0	4	58.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	195.9	199.0	CRAWFORD St
2992 - 2993	6 0	5	58.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0	196.2	199.0	CRAWFORD St
2993 - 4021	6 0	10	58.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0	196.8	199.0	CRAWFORD St
4021 - 4445	6 0	37	58.1	0.0	2.3	0.0	0.0	0.0	2.3	0.0	199.1	199.0	CRAWFORD St
4445 - 4303	6 0	69	58.0	0.0	4.3	0.0	0.0	0.0	4.3	0.0	203.4	199.0	CRAWFORD St
4303 - 4022	6 0	104	58.0	0.0	6.5	0.0	0.0	0.0	6.5	0.0	209.8	199.0	CRAWFORD St
4022 - 2991	6 0	8	58.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	210.3	199.0	CRAWFORD ST

2991 - 2899	6	7	4	58.0	0.4	0.2	35.0	11.0	17.0	11.2	52.0	221.6	251.0	CRAWFORD ST
2899 - 2900	6	0	4	58.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	221.8	251.0	CRAWFORD ST
2900 - 2761	6	0	8	58.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	222.3	251.0	CRAWFORD ST
2761 - 4436	6	0	107	58.6	0.0	6.6	0.0	0.0	0.0	6.6	0.0	228.9	251.0	CRAWFORD St
4436 - 2762	6	0	72	58.6	0.0	4.4	0.0	0.0	0.0	4.4	0.0	233.3	251.0	CRAWFORD St
2762 - 3008	6	0	32	58.6	0.0	2.0	0.0	0.0	0.0	2.0	0.0	235.3	251.0	CRAWFORD St
3008 - 3307	6	0	13	58.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	236.1	251.0	CRAWFORD St
3307 - 2492	6	7	5	58.6	0.6	0.3	28.0	41.0	5.0	41.3	33.0	277.4	284.0	CRAWFORD St
2492 - 3264	14	0	5	42.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	277.8	284.0	CRAWFORD St
3264 - 2452	14	0	10	42.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	278.6	284.0	CRAWFORD St
2452 - 4478	14	0	81	42.6	0.0	6.8	0.0	0.0	0.0	6.8	0.0	285.5	284.0	CRAWFORD St
4478 - 2453	14	0	13	42.6	0.0	1.1	0.0	0.0	0.0	1.1	0.0	286.6	284.0	CRAWFORD St
2453 - 2946	5	0	103	47.6	0.0	7.8	0.0	0.0	0.0	7.8	0.0	294.4	284.0	CRAWFORD St
2946 - 4178	5	3	20	47.6	2.7	1.5	27.0	8.0	0.0	9.5	27.0	303.9	311.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	305.7	311.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	312.1	311.0	CRAWFORD ST
4319 - 4017	4	0	69	39.3	0.0	6.3	0.0	0.0	0.0	6.3	0.0	318.4	311.0	CRAWFORD ST
4017 - 2904	4	0	10	39.3	2.8	0.9	13.0	0.0	0.0	0.9	13.0	319.3	324.0	CRAWFORD ST
2904 - 4018	5	0	9	49.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	320.0	324.0	THORPE Ave
4018 - 4328	5	0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	326.3	324.0	THORPE Ave
4328 - 4325	5	0	30	49.2	0.0	2.2	0.0	0.0	0.0	2.2	0.0	328.5	324.0	THORPE Ave
4325 - 2281	5	0	148	49.2	23.2	10.8	23.0	0.0	0.0	10.8	23.0	339.4	347.0	THORPE Ave

Modelled Totals	4069	43.2	262.4	77.0	339.4
Observed Totals			0.0	347.0	0.0 347.0

Observed Journey Time =	347.00	Implied Average Speed =	42.2
Modelled Journey Time =	339.37	Modelled Average Speed =	43.2
	97.80%		102.25%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
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Journey 4 Movement Analysis - times in seconds

RouteBWB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
2281 - 4325	5 0	148	49.7	0.0	10.7	0.0	0.0	0.0	10.7	0.0	10.7	0.0	THORPE Ave
4325 - 4328	5 0	30	49.7	0.0	2.2	0.0	0.0	0.0	2.2	0.0	12.9	0.0	THORPE Ave
4328 - 4018	5 0	87	49.1	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.3	0.0	THORPE Ave
4018 - 2904	5 0	9	49.1	1.3	0.7	25.0	0.0	0.0	0.7	25.0	19.9	25.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	20.8	25.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.1	25.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.4	25.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	4.5	1.8	16.0	11.0	0.0	12.8	16.0	46.2	41.0	CRAWFORD ST
4178 - 2946	5 0	20	49.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	47.7	41.0	CRAWFORD ST
2946 - 2453	5 0	103	49.0	0.0	7.6	0.0	2.0	0.0	9.6	0.0	57.3	41.0	CRAWFORD St
2453 - 4478	14 0	13	44.1	0.0	1.1	0.0	0.0	0.0	1.1	0.0	58.3	41.0	CRAWFORD St
4478 - 2452	14 0	81	44.0	0.0	6.6	0.0	0.0	0.0	6.6	0.0	65.0	41.0	CRAWFORD St
2452 - 3264	14 0	10	44.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	65.8	41.0	CRAWFORD St
3264 - 2492	14 7	5	44.0	0.8	0.4	24.0	74.0	7.0	74.4	31.0	140.2	72.0	CRAWFORD St
2492 - 3307	6 0	5	59.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0	140.5	72.0	CRAWFORD St
3307 - 3516	6 0	13	59.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	141.3	72.0	CRAWFORD St
3516 - 3515	6 0	33	59.3	0.0	2.0	0.0	0.0	0.0	2.0	0.0	143.3	72.0	CRAWFORD ST
3515 - 4435	6 0	71	59.3	0.0	4.3	0.0	0.0	0.0	4.3	0.0	147.6	72.0	CRAWFORD ST
4435 - 3514	6 0	107	59.2	0.0	6.5	0.0	0.0	0.0	6.5	0.0	154.1	72.0	CRAWFORD ST
3514 - 2900	6 0	6	59.2	0.0	0.4	0.0	0.0	0.0	0.4	0.0	154.5	72.0	CRAWFORD ST
2900 - 2899	6 7	4	59.2	0.8	0.2	19.0	11.0	31.0	11.2	50.0	165.7	122.0	CRAWFORD ST
2899 - 2991	6 0	4	58.8	0.0	0.2	0.0	0.0	0.0	0.2	0.0	166.0	122.0	CRAWFORD ST
2991 - 4020	6 0	7	58.8	0.0	0.4	0.0	0.0	0.0	0.4	0.0	166.4	122.0	CRAWFORD ST
4020 - 4309	6 0	106	58.8	0.0	6.5	0.0	0.0	0.0	6.5	0.0	172.9	122.0	CRAWFORD St
4309 - 4019	6 0	106	58.8	0.0	6.5	0.0	0.0	0.0	6.5	0.0	179.4	122.0	CRAWFORD St
4019 - 2993	6 0	8	58.8	0.0	0.5	0.0	0.0	0.0	0.5	0.0	179.9	122.0	CRAWFORD St
2993 - 2992	6 0	5	58.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	180.2	122.0	CRAWFORD St
2992 - 2994	6 0	4	58.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	180.4	122.0	CRAWFORD St
2994 - 4024	6 0	10	58.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	181.0	122.0	CRAWFORD St
4024 - 4443	6 0	82	58.7	0.0	5.0	0.0	0.0	0.0	5.0	0.0	186.1	122.0	CRAWFORD St
4443 - 4027	6 0	120	58.7	0.0	7.4	0.0	0.0	0.0	7.4	0.0	193.4	122.0	CRAWFORD St
4027 - 2996	6 0	14	58.7	0.0	0.9	0.0	0.0	0.0	0.9	0.0	194.3	122.0	CRAWFORD ST
2996 - 2995	6 0	6	58.7	0.6	0.4	35.0	0.0	0.0	0.4	35.0	194.6	157.0	CRAWFORD ST
2995 - 2997	6 0	6	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	195.0	157.0	CRAWFORD ST
2997 - 4025	6 0	19	58.3	0.0	1.2	0.0	0.0	0.0	1.2	0.0	196.2	157.0	CRAWFORD ST
4025 - 3000	6 0	70	58.3	0.0	4.3	0.0	0.0	0.0	4.3	0.0	200.5	157.0	CRAWFORD ST
3000 - 3093	6 0	7	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	200.9	157.0	CRAWFORD ST
3093 - 3092	6 0	4	58.3	0.0	0.2	0.0	0.0	0.0	0.2	0.0	201.2	157.0	CRAWFORD ST
3092 - 3094	6 0	4	58.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	201.4	157.0	CRAWFORD ST
3094 - 2998	6 0	7	58.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	201.9	157.0	CRAWFORD ST
2998 - 3256	6 0	116	58.4	0.0	7.2	0.0	2.4	0.0	9.6	0.0	211.4	157.0	CRAWFORD
3256 - 2451	6 0	61	56.8	0.0	3.9	0.0	0.0	0.0	3.9	0.0	215.3	157.0	URIARRA Rd
2451 - 3259	6 0	72	56.7	0.0	4.6	0.0	0.8	0.0	5.4	0.0	220.7	157.0	URIARRA Rd
3259 - 3020	6 0	6	56.7	0.8	0.4	26.0	0.0	0.0	0.4	26.0	221.0	183.0	URIARRA Rd
3020 - 4057	6 0	228	56.9	0.0	14.4	0.0	0.0	0.0	14.4	0.0	235.5	183.0	URIARRA Rd
4057 - 2111	5 0	13	46.5	2.6	1.0	18.0	0.0	0.0	1.0	18.0	236.5	201.0	URIARRA Rd
2111 - 4056	5 0	12	46.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	237.4	201.0	URIARRA Rd
4056 - 2771	5 0	21	46.5	0.0	1.6	0.0	0.0	0.0	1.6	0.0	239.0	201.0	URIARRA Rd

2771 - 2772	6 0	152	57.3	0.0	9.5	0.0	0.0	0.0	9.5	0.0	248.6	201.0	URIARRA Rd
2772 - 2734	6 0	75	57.4	0.0	4.7	0.0	0.0	0.0	4.7	0.0	253.3	201.0	URIARRA Rd
2734 - 2735	6 0	39	57.2	0.0	2.5	0.0	0.0	0.0	2.5	0.0	255.7	201.0	URIARRA Rd
2735 - 4058	6 0	119	57.1	0.0	7.5	0.0	0.0	0.0	7.5	0.0	263.2	201.0	URIARRA Rd
4058 - 2440	5 0	15	46.6	1.9	1.2	29.0	0.0	0.0	1.2	29.0	264.4	230.0	URIARRA Rd
2440 - 4059	5 0	10	46.8	0.0	0.8	0.0	0.0	0.0	0.8	0.0	265.2	230.0	URIARRA Rd
4059 - 2246	6 0	129	57.2	0.0	8.1	0.0	0.0	0.0	8.1	0.0	273.3	230.0	URIARRA Rd
2246 - 2179	6 0	74	57.2	0.0	4.7	0.0	0.0	0.0	4.7	0.0	277.9	230.0	URIARRA Rd
2179 - 2416	6 0	142	57.2	0.0	8.9	0.0	0.0	0.0	8.9	0.0	286.9	230.0	URIARRA Rd
2416 - 2773	6 0	82	57.2	0.0	5.2	0.0	0.0	0.0	5.2	0.0	292.0	230.0	URIARRA Rd
2773 - 2774	6 0	90	57.2	0.0	5.7	0.0	0.0	0.0	5.7	0.0	297.7	230.0	URIARRA Rd
2774 - 4173	6 3	24	57.2	2.0	1.5	44.0	18.0	12.0	19.5	56.0	317.2	286.0	URIARRA Rd
4173 - 2730	6 0	25	56.6	0.0	1.6	0.0	0.0	0.0	1.6	0.0	318.8	286.0	URIARRA Rd
2730 - 2731	7 0	139	67.2	0.0	7.4	0.0	0.0	0.0	7.4	0.0	326.2	286.0	URIARRA Rd
2731 - 3021	7 0	28	67.2	0.0	1.5	0.0	0.0	0.0	1.5	0.0	327.7	286.0	URIARRA Rd
3021 - 7255	7 0	92	67.2	0.0	4.9	0.0	0.0	0.0	4.9	0.0	332.7	286.0	
7255 - 7256	7 0	52	67.2	7.8	2.8	24.0	0.0	0.0	2.8	24.0	335.5	310.0	
7256 - 8989	7 0	483	67.3	0.0	25.8	0.0	0.0	0.0	25.8	0.0	361.3	310.0	
8989 - 9001	6 2	635	56.7	40.8	40.3	56.0	8.5	0.0	48.8	56.0	410.1	366.0	

Modelled Totals	4436	38.9		282.4		127.7			410.1				
Observed Totals			0.0		340.0			0.0		340.0			

Observed Journey Time =	340.00	Implied Average Speed =	47.0
Modelled Journey Time =	410.11	Modelled Average Speed =	38.9
	120.62%		82.90%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 5 Movement Analysis - times in seconds

RouteCEB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
7426 - 7289	8 0	19	75.7	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.9	0.0	
7289 - 7333	8 0	16	76.2	0.0	0.8	0.0	0.0	0.0	0.8	0.0	1.7	0.0	
7333 - 7493	8 0	84	77.3	0.0	3.9	0.0	3.3	0.0	7.2	0.0	8.9	0.0	
7493 - 7495	5 0	482	37.9	0.0	45.8	0.0	0.0	0.0	45.8	0.0	54.7	0.0	
7495 - 7334	5 4	191	48.1	0.0	14.3	0.0	7.4	0.0	21.7	0.0	76.4	0.0	
7334 - 8063	5 0	15	47.7	0.7	1.1	82.0	0.0	0.0	1.1	82.0	77.5	82.0	
8063 - 7330	8 0	19	78.2	0.0	0.9	0.0	10.0	0.0	10.9	0.0	88.4	82.0	
7330 - 4852	5 0	78	49.9	0.0	5.6	0.0	2.0	0.0	7.6	0.0	96.0	82.0	
4852 - 7496	5 2	33	49.8	0.0	2.4	0.0	9.8	0.0	12.2	0.0	108.2	82.0	
7496 - 4454	5 3	469	46.0	45.6	36.7	37.0	7.4	0.0	44.1	37.0	152.3	119.0	
4454 - 4456	5 3	679	46.0	64.3	53.1	38.0	11.6	0.0	64.7	38.0	217.0	157.0	
4456 - 9206	9 0	894	85.3	59.6	37.7	54.0	0.0	0.0	37.7	54.0	254.7	211.0	
9206 - 8281	9 0	3257	84.7	79.8	138.4	147.0	0.0	0.0	138.4	147.0	393.2	358.0	
8281 - 7329	9 0	662	86.8	0.0	27.5	0.0	0.0	0.0	27.5	0.0	420.6	358.0	
7329 - 8028	9 0	729	86.9	0.0	30.2	0.0	0.0	0.0	30.2	0.0	450.8	358.0	
8028 - 3638	8 0	141	76.6	0.0	6.6	0.0	0.0	0.0	6.6	0.0	457.5	358.0	
3638 - 4189	7 0	37	66.7	0.0	2.0	0.0	0.0	0.0	2.0	0.0	459.5	358.0	YASS Rd
4189 - 4192	6 0	6	55.9	0.0	0.4	0.0	0.0	0.0	0.4	0.0	459.8	358.0	YASS Rd
4192 - 4191	6 0	5	55.9	0.0	0.3	0.0	0.0	0.0	0.3	0.0	460.2	358.0	YASS Rd
4191 - 4193	6 0	4	58.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	460.4	358.0	YASS Rd
4193 - 4188	6 0	7	58.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	460.8	358.0	YASS Rd
4188 - 4233	6 0	214	58.0	0.0	13.3	0.0	0.0	0.0	13.3	0.0	474.1	358.0	YASS RD
4233 - 4236	6 0	8	58.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	474.6	358.0	YASS Rd
4236 - 4235	6 0	7	58.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	475.1	358.0	YASS Rd
4235 - 4237	6 0	5	58.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	475.4	358.0	YASS Rd
4237 - 4232	6 0	9	58.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	475.9	358.0	YASS Rd
4232 - 4226	6 0	29	58.0	0.0	1.8	0.0	0.0	0.0	1.8	0.0	477.7	358.0	YASS RD
4226 - 4229	6 0	8	58.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	478.2	358.0	YASS Rd
4229 - 4228	6 0	7	58.0	0.3	0.4	94.0	0.0	9.0	0.4	103.0	478.7	461.0	YASS Rd
4228 - 4230	6 0	6	57.8	0.0	0.4	0.0	0.0	0.0	0.4	0.0	479.0	461.0	YASS Rd
4230 - 4225	6 0	10	57.8	0.0	0.6	0.0	0.0	0.0	0.6	0.0	479.7	461.0	YASS Rd
4225 - 2798	6 0	176	57.8	0.0	11.0	0.0	0.0	0.0	11.0	0.0	490.6	461.0	YASS RD
2798 - 2893	6 0	10	57.8	0.0	0.6	0.0	0.0	0.0	0.6	0.0	491.2	461.0	YASS Rd
2893 - 2894	6 0	11	57.8	0.0	0.7	0.0	0.0	0.0	0.7	0.0	491.9	461.0	YASS Rd
2894 - 2892	6 0	8	57.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	492.4	461.0	YASS Rd
2892 - 2891	6 0	10	57.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	493.1	461.0	YASS Rd
2891 - 3635	6 0	173	57.4	0.0	10.9	0.0	0.0	0.0	10.9	0.0	503.9	461.0	YASS RD
3635 - 2797	6 0	6	57.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	504.3	461.0	YASS RD
2797 - 2792	6 0	3	57.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	504.5	461.0	YASS RD
2792 - 2795	6 0	7	57.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	504.9	461.0	YASS RD
2795 - 2793	6 0	11	57.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	505.6	461.0	YASS RD
2793 - 3634	6 0	70	57.5	0.0	4.4	0.0	0.0	0.0	4.4	0.0	510.0	461.0	YASS RD
3634 - 2695	6 0	73	57.5	0.0	4.6	0.0	0.0	0.0	4.6	0.0	514.6	461.0	YASS RD
2695 - 2699	6 0	12	57.5	0.0	0.8	0.0	0.0	0.0	0.8	0.0	515.3	461.0	YASS RD
2699 - 2791	6 0	6	57.5	0.6	0.4	38.0	0.0	0.0	0.4	38.0	515.7	499.0	YASS RD
2791 - 2700	15 0	5	52.7	0.0	0.3	0.0	0.0	0.0	0.3	0.0	516.0	499.0	YASS RD
2700 - 2698	15 0	13	52.7	0.0	0.9	0.0	0.0	0.0	0.9	0.0	516.9	499.0	YASS RD
2698 - 2600	15 0	206	52.7	0.0	14.1	0.0	0.0	0.0	14.1	0.0	531.0	499.0	YASS RD

2600 - 2692	15	0	17	52.7	0.0	1.2	0.0	0.0	0.0	1.2	0.0	532.1	499.0	YASS RD
2692 - 2694	15	0	11	52.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	532.9	499.0	YASS RD
2694 - 2693	15	0	9	52.7	0.0	0.6	0.0	0.0	0.0	0.6	0.0	533.5	499.0	YASS RD
2693 - 2598	15	0	18	52.7	0.0	1.2	0.0	0.0	0.0	1.2	0.0	534.7	499.0	YASS RD
2598 - 3757	15	0	28	52.7	0.0	1.9	0.0	0.0	0.0	1.9	0.0	536.6	499.0	YASS RD
3757 - 3484	15	4	114	52.7	10.8	7.8	38.0	14.0	10.0	21.8	48.0	558.4	547.0	YASS RD
3484 - 3633	6	0	22	58.1	0.0	1.4	0.0	0.0	0.0	1.4	0.0	559.8	547.0	ELLERTON DR/BUNGENDOR
3633 - 3309	6	0	7	58.1	0.0	0.4	0.0	0.0	0.0	0.4	0.0	560.2	547.0	ELLERTON DR/BUNGENDOR
3309 - 2374	6	0	20	55.5	0.0	1.3	0.0	0.0	0.0	1.3	0.0	561.5	547.0	ELLERTON DR/BUNGENDOR
2374 - 3301	6	0	8	55.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	562.0	547.0	ELLERTON DR/BUNGENDOR
3301 - 2727	6	0	20	56.6	0.0	1.3	0.0	0.0	0.0	1.3	0.0	563.3	547.0	ELLERTON DR/BUNGENDOR
2727 - 2726	6	0	178	56.6	0.0	11.3	0.0	0.0	0.0	11.3	0.0	574.6	547.0	BUNGENDORE St
2726 - 3017	6	4	215	56.6	14.6	13.7	53.0	20.9	0.0	34.6	53.0	609.2	600.0	MONARO St
3017 - 3979	6	0	10	55.3	0.0	0.7	0.0	0.0	0.0	0.7	0.0	609.9	600.0	MONARO St
3979 - 3983	6	0	19	57.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	611.1	600.0	MONARO St
3983 - 3019	6	0	13	55.7	0.0	0.8	0.0	0.0	0.0	0.8	0.0	611.9	600.0	MONARO St
3019 - 2594	6	0	50	57.1	0.0	3.2	0.0	0.0	0.0	3.2	0.0	615.1	600.0	MONARO St
2594 - 3018	15	0	265	48.0	0.0	19.9	0.0	0.0	0.0	19.9	0.0	634.9	600.0	MONARO St
3018 - 2593	15	0	198	48.0	23.0	14.9	31.0	0.0	0.0	14.9	31.0	649.8	631.0	MONARO St
2593 - 3189	15	0	18	48.0	0.0	1.4	0.0	0.0	0.0	1.4	0.0	651.1	631.0	MONARO St
3189 - 4441	15	0	43	51.8	0.0	3.0	0.0	0.0	0.0	3.0	0.0	654.1	631.0	MONARO St
4441 - 2496	15	0	95	51.8	0.0	6.6	0.0	0.0	0.0	6.6	0.0	660.7	631.0	MONARO St
2496 - 2498	15	0	9	51.8	0.0	0.6	0.0	0.0	0.0	0.6	0.0	661.4	631.0	MONARO St
2498 - 2492	15	6	6	51.8	0.6	0.4	34.0	50.0	10.0	50.4	44.0	711.8	675.0	MONARO St
2492 - 3264	14	0	5	42.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	712.2	675.0	CRAWFORD St
3264 - 2452	14	0	10	42.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	713.0	675.0	CRAWFORD St
2452 - 4478	14	0	81	42.6	0.0	6.8	0.0	0.0	0.0	6.8	0.0	719.9	675.0	CRAWFORD St
4478 - 2453	14	0	13	42.6	0.0	1.1	0.0	0.0	0.0	1.1	0.0	721.0	675.0	CRAWFORD St
2453 - 2946	5	0	103	47.6	0.0	7.8	0.0	0.0	0.0	7.8	0.0	728.8	675.0	CRAWFORD St
2946 - 4178	5	3	20	47.6	3.0	1.5	24.0	8.0	0.0	9.5	24.0	738.3	699.0	CRAWFORD ST
4178 - 4016	4	0	20	39.2	0.0	1.8	0.0	0.0	0.0	1.8	0.0	740.1	699.0	CRAWFORD ST
4016 - 4319	4	0	69	39.2	0.0	6.3	0.0	0.0	0.0	6.3	0.0	746.5	699.0	CRAWFORD ST
4319 - 4017	4	0	69	39.3	0.0	6.3	0.0	0.0	0.0	6.3	0.0	752.8	699.0	CRAWFORD ST
4017 - 2904	4	0	10	39.3	2.0	0.9	18.0	0.0	0.0	0.9	18.0	753.7	717.0	CRAWFORD ST
2904 - 4018	5	0	9	49.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0	754.4	717.0	THORPE Ave
4018 - 4328	5	0	87	49.0	0.0	6.4	0.0	0.0	0.0	6.4	0.0	760.7	717.0	THORPE Ave
4328 - 4325	5	0	30	49.2	0.0	2.2	0.0	0.0	0.0	2.2	0.0	762.9	717.0	THORPE Ave
4325 - 2281	5	0	148	49.2	22.2	10.8	24.0	0.0	0.0	10.8	24.0	773.8	741.0	THORPE Ave

Modelled Totals	10997	51.2	629.4	144.4	773.8
Observed Totals		0.0	739.0	0.0	739.0

Observed Journey Time =	739.00	Implied Average Speed =	53.6
Modelled Journey Time =	773.77	Modelled Average Speed =	51.2
	104.71%		95.51%


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| TRACKS - 29-JAN-13 @ 1                                     Gabites Porter |
|                                                                 Christchurch, N.Z. |
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Journey 6 Movement Analysis - times in seconds

RouteCWB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
2281 - 4325	5 0	148	49.7	0.0	10.7	0.0	0.0	0.0	10.7	0.0	10.7	0.0	THORPE Ave
4325 - 4328	5 0	30	49.7	0.0	2.2	0.0	0.0	0.0	2.2	0.0	12.9	0.0	THORPE Ave
4328 - 4018	5 0	87	49.1	0.0	6.4	0.0	0.0	0.0	6.4	0.0	19.3	0.0	THORPE Ave
4018 - 2904	5 0	9	49.1	1.2	0.7	28.0	0.0	0.0	0.7	28.0	19.9	28.0	THORPE Ave
2904 - 4017	4 0	10	39.5	0.0	0.9	0.0	0.0	0.0	0.9	0.0	20.8	28.0	CRAWFORD ST
4017 - 4319	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	27.1	28.0	CRAWFORD ST
4319 - 4016	4 0	69	39.5	0.0	6.3	0.0	0.0	0.0	6.3	0.0	33.4	28.0	CRAWFORD ST
4016 - 4178	4 3	20	39.5	4.8	1.8	15.0	11.0	0.0	12.8	15.0	46.2	43.0	CRAWFORD ST
4178 - 2946	5 0	20	49.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	47.7	43.0	CRAWFORD ST
2946 - 2453	5 0	103	49.0	0.0	7.6	0.0	2.0	0.0	9.6	0.0	57.3	43.0	CRAWFORD St
2453 - 4478	14 0	13	44.1	0.0	1.1	0.0	0.0	0.0	1.1	0.0	58.3	43.0	CRAWFORD St
4478 - 2452	14 0	81	44.0	0.0	6.6	0.0	0.0	0.0	6.6	0.0	65.0	43.0	CRAWFORD St
2452 - 3264	14 0	10	44.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	65.8	43.0	CRAWFORD St
3264 - 2492	14 7	5	44.0	0.7	0.4	25.0	76.0	20.0	76.4	45.0	142.2	88.0	CRAWFORD St
2492 - 2498	15 0	6	52.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	142.6	88.0	MONARO St
2498 - 2495	15 0	11	52.6	0.0	0.8	0.0	0.0	0.0	0.8	0.0	143.4	88.0	MONARO St
2495 - 4438	15 0	98	52.6	0.0	6.7	0.0	0.0	0.0	6.7	0.0	150.1	88.0	MONARO St
4438 - 3305	15 0	36	52.6	0.0	2.5	0.0	0.0	0.0	2.5	0.0	152.5	88.0	MONARO St
3305 - 2593	15 0	19	50.9	0.0	1.3	0.0	0.0	0.0	1.3	0.0	153.9	88.0	MONARO St
2593 - 3018	15 0	198	50.9	20.4	14.0	35.0	0.0	0.0	14.0	35.0	167.9	123.0	MONARO St
3018 - 2594	15 0	265	50.9	0.0	18.7	0.0	0.0	0.0	18.7	0.0	186.6	123.0	MONARO St
2594 - 3304	6 4	51	55.6	8.7	3.3	21.0	15.3	0.0	18.6	21.0	205.2	144.0	MONARO St
3304 - 3629	6 0	10	46.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	206.0	144.0	MONARO St
3629 - 2671	6 0	19	57.5	0.0	1.2	0.0	0.0	0.0	1.2	0.0	207.2	144.0	MONARO St
2671 - 3303	6 0	6	56.4	0.0	0.4	0.0	0.0	0.0	0.4	0.0	207.6	144.0	MONARO St
3303 - 3155	6 0	219	57.8	0.0	13.6	0.0	0.0	0.0	13.6	0.0	221.2	144.0	MONARO St
3155 - 3302	6 0	173	57.8	0.0	10.8	0.0	0.0	0.0	10.8	0.0	232.0	144.0	BUNGENDORE ST
3302 - 3308	6 4	22	57.8	2.3	1.4	35.0	11.0	0.0	12.4	35.0	244.4	179.0	ELLERTON DR/BUNGENDOR
3308 - 2599	15 0	155	53.3	0.0	10.5	0.0	0.0	0.0	10.5	0.0	254.8	179.0	YASS Rd
2599 - 2693	15 0	16	53.3	0.0	1.1	0.0	0.0	0.0	1.1	0.0	255.9	179.0	YASS RD
2693 - 2694	15 0	9	53.3	0.0	0.6	0.0	0.0	0.0	0.6	0.0	256.5	179.0	YASS RD
2694 - 2692	15 0	11	53.3	0.0	0.7	0.0	0.0	0.0	0.7	0.0	257.3	179.0	YASS RD
2692 - 2691	15 0	17	53.3	0.0	1.1	0.0	0.0	0.0	1.1	0.0	258.4	179.0	YASS RD
2691 - 2697	15 0	205	53.3	0.0	13.8	0.0	0.0	0.0	13.8	0.0	272.3	179.0	YASS Rd
2697 - 2700	15 0	12	53.3	0.0	0.8	0.0	0.0	0.0	0.8	0.0	273.1	179.0	YASS RD
2700 - 2791	15 0	5	53.3	0.6	0.3	32.0	0.0	4.0	0.3	36.0	273.4	215.0	YASS RD
2791 - 2699	6 0	6	58.1	0.0	0.4	0.0	0.0	0.0	0.4	0.0	273.8	215.0	YASS RD
2699 - 2696	6 0	13	58.1	0.0	0.8	0.0	0.0	0.0	0.8	0.0	274.6	215.0	YASS RD
2696 - 2908	6 0	72	58.1	0.0	4.5	0.0	0.0	0.0	4.5	0.0	279.0	215.0	YASS Rd
2908 - 2794	6 0	70	58.3	0.0	4.3	0.0	0.0	0.0	4.3	0.0	283.4	215.0	YASS Rd
2794 - 2795	6 0	6	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	283.7	215.0	YASS RD
2795 - 2792	6 0	7	58.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	284.2	215.0	YASS RD
2792 - 2797	6 0	3	58.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	284.4	215.0	YASS RD
2797 - 2796	6 0	10	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	285.0	215.0	YASS RD
2796 - 2800	6 0	169	58.4	0.0	10.4	0.0	0.0	0.0	10.4	0.0	295.4	215.0	YASS Rd
2800 - 2892	6 0	10	58.4	0.0	0.6	0.0	0.0	0.0	0.6	0.0	296.0	215.0	YASS Rd
2892 - 2894	6 0	8	58.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	296.5	215.0	YASS Rd
2894 - 2893	6 0	11	58.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	297.2	215.0	YASS Rd

2893 - 2799	6	0	12	58.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	297.9	215.0	YASS Rd
2799 - 4392	6	0	143	58.5	0.0	8.8	0.0	0.0	0.0	8.8	0.0	306.7	215.0	YASS Rd
4392 - 4224	6	0	32	58.5	0.0	2.0	0.0	0.0	0.0	2.0	0.0	308.7	215.0	YASS Rd
4224 - 4230	6	0	8	58.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	309.2	215.0	YASS Rd
4230 - 4228	6	0	6	58.5	0.6	0.4	34.0	0.0	4.0	0.4	38.0	309.5	253.0	YASS Rd
4228 - 4229	6	0	7	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	310.0	253.0	YASS Rd
4229 - 4227	6	0	9	58.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	310.5	253.0	YASS Rd
4227 - 4231	6	0	29	58.5	0.0	1.8	0.0	0.0	0.0	1.8	0.0	312.3	253.0	YASS Rd
4231 - 4237	6	0	7	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	312.7	253.0	YASS Rd
4237 - 4235	6	0	5	58.5	0.0	0.3	0.0	0.0	0.0	0.3	0.0	313.0	253.0	YASS Rd
4235 - 4236	6	0	7	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	313.5	253.0	YASS Rd
4236 - 4234	6	0	11	58.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	314.2	253.0	YASS Rd
4234 - 2897	6	0	211	58.5	0.0	13.0	0.0	0.0	0.0	13.0	0.0	327.1	253.0	YASS Rd
2897 - 4193	6	0	6	58.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	327.5	253.0	YASS Rd
4193 - 4191	6	0	4	58.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	327.8	253.0	YASS Rd
4191 - 4192	6	0	5	56.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	328.1	253.0	YASS Rd
4192 - 4190	6	0	8	56.8	0.0	0.5	0.0	0.0	0.0	0.5	0.0	328.6	253.0	YASS Rd
4190 - 3024	7	0	36	67.4	0.0	1.9	0.0	0.0	0.0	1.9	0.0	330.5	253.0	YASS Rd
3024 - 8028	8	0	139	77.4	0.0	6.5	0.0	0.0	0.0	6.5	0.0	337.0	253.0	
8028 - 7329	9	0	729	87.5	0.0	30.0	0.0	0.0	0.0	30.0	0.0	367.0	253.0	
7329 - 8281	9	0	662	87.6	27.7	27.2	86.0	0.0	0.0	27.2	86.0	394.2	339.0	
8281 - 9206	9	0	3257	86.9	86.2	134.9	136.0	0.0	0.0	134.9	136.0	529.1	475.0	
9206 - 4456	9	3	894	86.8	63.1	37.1	51.0	11.0	0.0	48.1	51.0	577.2	526.0	
4456 - 4454	5	3	679	45.6	62.7	53.6	39.0	8.0	0.0	61.6	39.0	638.8	565.0	
4454 - 7496	5	0	469	44.8	0.0	37.7	0.0	0.0	0.0	37.7	0.0	676.5	565.0	
7496 - 4852	5	0	33	49.6	0.0	2.4	0.0	0.0	0.0	2.4	0.0	678.9	565.0	
4852 - 7330	5	4	78	49.6	2.0	5.7	137.0	14.6	9.0	20.3	146.0	699.1	711.0	
7330 - 7331	8	0	35	78.0	0.0	1.6	0.0	0.0	0.0	1.6	0.0	700.7	711.0	
7331 - 4851	5	0	181	47.6	9.6	13.7	68.0	2.6	0.0	16.3	68.0	717.0	779.0	
4851 - 7494	5	2	45	45.4	0.0	3.6	0.0	9.6	0.0	13.2	0.0	730.2	779.0	
7494 - 7492	5	0	431	20.8	0.0	74.6	0.0	0.0	0.0	74.6	0.0	804.8	779.0	
7492 - 7332	8	4	85	76.7	2.7	4.0	112.0	39.4	0.0	43.4	112.0	848.2	891.0	

Modelled Totals	10885	46.2		647.7		200.5		848.2	
Observed Totals			0.0		889.0		0.0		889.0

Observed Journey Time =	889.00	Implied Average Speed =	44.1
Modelled Journey Time =	848.18	Modelled Average Speed =	46.2
	95.41%		104.81%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 7 Movement Analysis - times in seconds

RouteDNB

Link	Types	Dist	Mdl	Obs	Mdl	Obs	Mdl	Obs	Mdl	Obs	Accum	Accum	Street Name
	Lnk Ap	(m)	Spd	Spd	Time	Time	Delay	Delay	Total	Total	Mdl	Time	
5601 - 5173	8 0	1110	76.8	0.0	52.0	0.0	0.0	0.0	52.0	0.0	52.0	0.0	THARWA RD
5173 - 2770	8 0	249	76.8	15.5	11.7	58.0	0.0	0.0	11.7	58.0	63.7	58.0	THARWA RD
2770 - 2769	7 0	58	66.9	0.0	3.1	0.0	0.0	0.0	3.1	0.0	66.8	58.0	THARWA RD
2769 - 3276	7 0	31	66.9	0.0	1.7	0.0	0.0	0.0	1.7	0.0	68.5	58.0	THARWA RD
3276 - 2096	7 4	10	66.9	1.7	0.5	21.0	16.9	0.0	17.4	21.0	85.9	79.0	THARWA RD
2096 - 3488	7 0	49	66.5	0.0	2.7	0.0	0.0	0.0	2.7	0.0	88.6	79.0	LANYON Dr
3488 - 3408	7 0	13	68.5	0.0	0.7	0.0	0.0	0.0	0.7	0.0	89.3	79.0	LANYON DR RBT
3408 - 3407	9 0	31	88.5	0.0	1.3	0.0	0.0	0.0	1.3	0.0	90.5	79.0	LANYON Dr
3407 - 2093	9 0	1549	88.5	0.0	63.0	0.0	0.0	0.0	63.0	0.0	153.5	79.0	LANYON Dr
2093 - 4145	9 0	32	88.6	0.0	1.3	0.0	0.0	0.0	1.3	0.0	154.8	79.0	LANYON Dr
4145 - 4150	9 0	7	88.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	155.1	79.0	LANYON Dr
4150 - 4149	9 0	5	88.6	0.2	0.2	84.0	0.0	0.0	0.2	84.0	155.3	163.0	LANYON Dr
4149 - 4151	9 0	6	88.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	155.6	163.0	LANYON Dr
4151 - 4146	9 0	8	88.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	155.9	163.0	LANYON Dr
4146 - 2094	9 0	8	88.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	156.2	163.0	LANYON Dr
2094 - 4140	9 0	183	88.5	0.0	7.4	0.0	0.0	0.0	7.4	0.0	163.7	163.0	LANYON Dr
4140 - 4143	9 0	10	88.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	164.1	163.0	LANYON Dr
4143 - 4142	9 0	6	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	164.3	163.0	LANYON Dr
4142 - 4144	9 0	6	88.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	164.6	163.0	LANYON Dr
4144 - 4141	9 0	12	88.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	165.0	163.0	LANYON Dr
4141 - 3187	9 0	14	88.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	165.6	163.0	LANYON Dr
3187 - 2092	9 0	177	88.5	0.0	7.2	0.0	0.0	0.0	7.2	0.0	172.8	163.0	LANYON Dr
2092 - 3013	9 0	225	88.5	0.0	9.2	0.0	0.0	0.0	9.2	0.0	182.0	163.0	LANYON Dr
3013 - 4131	9 0	14	88.5	0.0	0.6	0.0	0.0	0.0	0.6	0.0	182.5	163.0	LANYON DR
4131 - 4136	9 0	10	88.7	0.0	0.4	0.0	0.0	0.0	0.4	0.0	182.9	163.0	LANYON Dr
4136 - 4135	9 0	5	88.7	0.0	0.2	0.0	0.0	0.0	0.2	0.0	183.1	163.0	LANYON Dr
4135 - 4137	18 0	5	83.5	0.0	0.2	0.0	0.0	0.0	0.2	0.0	183.4	163.0	LANYON Dr
4137 - 4132	18 0	10	83.5	0.0	0.4	0.0	0.0	0.0	0.4	0.0	183.8	163.0	LANYON Dr
4132 - 4208	18 0	82	83.3	0.0	3.5	0.0	0.0	0.0	3.5	0.0	187.3	163.0	LANYON Dr
4208 - 3014	18 0	148	83.3	0.0	6.4	0.0	0.0	0.0	6.4	0.0	193.7	163.0	LANYON Dr
3014 - 3828	18 4	20	83.3	1.6	0.9	45.0	12.0	0.0	12.9	45.0	206.6	208.0	LANYON DR
3828 - 3826	8 0	38	78.0	0.0	1.8	0.0	0.0	0.0	1.8	0.0	208.4	208.0	LANYON DR RBT
3826 - 3265	6 0	20	58.0	0.0	1.2	0.0	0.0	0.0	1.2	0.0	209.6	208.0	LANYON DR
3265 - 4206	6 0	503	58.0	0.0	31.2	0.0	0.0	0.0	31.2	0.0	240.8	208.0	LANYON Dr
4206 - 4127	6 0	83	58.0	0.0	5.2	0.0	0.0	0.0	5.2	0.0	246.0	208.0	LANYON Dr
4127 - 4129	6 0	10	58.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	246.6	208.0	LANYON Dr
4129 - 4128	6 0	6	58.0	0.5	0.4	42.0	0.0	0.0	0.4	42.0	247.0	250.0	LANYON Dr
4128 - 4130	6 0	8	57.8	0.0	0.5	0.0	0.0	0.0	0.5	0.0	247.5	250.0	LANYON Dr
4130 - 4125	6 0	12	57.8	0.0	0.7	0.0	0.0	0.0	0.7	0.0	248.2	250.0	LANYON Dr
4125 - 3250	6 4	199	57.8	35.8	12.4	20.0	11.8	0.0	24.2	20.0	272.4	270.0	LANYON Dr

Modelled Totals	4972	65.7		231.7		40.7			272.4			
Observed Totals				0.0		270.0		0.0			270.0	

Observed Journey Time =	270.00	Implied Average Speed =	66.3
Modelled Journey Time =	272.40	Modelled Average Speed =	65.7
	100.89%		99.12%

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| TRACKS - 29-JAN-13 @ 1                               Gabites Porter |
|                                                         Christchurch, N.Z. |
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Journey 8 Movement Analysis - times in seconds

RouteDSB

Link	Types Lnk Ap	Dist (m)	Mdl Spd	Obs Spd	Mdl Time	Obs Time	Mdl Delay	Obs Delay	Mdl Total	Obs Total	Accum Mdl	Accum Time	Street Name
2987 - 2091	6 0	121	55.1	0.0	7.9	0.0	0.0	0.0	7.9	0.0	7.9	0.0	LANYON Dr
2091 - 4124	6 0	120	55.8	0.0	7.7	0.0	0.0	0.0	7.7	0.0	15.6	0.0	LANYON Dr
4124 - 4130	6 0	13	55.8	0.0	0.8	0.0	0.0	0.0	0.8	0.0	16.5	0.0	LANYON Dr
4130 - 4128	6 0	8	55.8	2.1	0.5	14.0	0.0	0.0	0.5	14.0	17.0	14.0	LANYON Dr
4128 - 4129	6 0	6	55.9	0.0	0.4	0.0	0.0	0.0	0.4	0.0	17.4	14.0	LANYON Dr
4129 - 4126	6 0	11	55.9	0.0	0.7	0.0	0.0	0.0	0.7	0.0	18.1	14.0	LANYON Dr
4126 - 4207	6 0	82	55.9	0.0	5.3	0.0	0.0	0.0	5.3	0.0	23.4	14.0	LANYON Dr
4207 - 3262	6 0	504	55.9	0.0	32.5	0.0	0.0	0.0	32.5	0.0	55.8	14.0	LANYON Dr
3262 - 3825	6 4	21	55.9	1.7	1.4	44.0	17.5	0.0	18.9	44.0	74.7	58.0	LANYON DR
3825 - 3823	8 0	10	76.2	0.0	0.5	0.0	0.0	0.0	0.5	0.0	75.2	58.0	LANYON DR RBT
3823 - 3824	8 0	17	77.9	0.0	0.8	0.0	0.0	0.0	0.8	0.0	75.9	58.0	LANYON DR RBT
3824 - 3827	8 0	8	76.9	0.0	0.4	0.0	0.0	0.0	0.4	0.0	76.3	58.0	LANYON DR RBT
3827 - 2767	18 0	21	82.4	0.0	0.9	0.0	0.0	0.0	0.9	0.0	77.2	58.0	LANYON DR
2767 - 4209	18 0	147	82.4	0.0	6.4	0.0	0.0	0.0	6.4	0.0	83.7	58.0	LANYON Dr
4209 - 4133	18 0	82	82.4	0.0	3.6	0.0	0.0	0.0	3.6	0.0	87.2	58.0	LANYON Dr
4133 - 4137	18 0	12	82.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	87.8	58.0	LANYON Dr
4137 - 4135	18 0	5	82.4	0.0	0.2	0.0	0.0	0.0	0.2	0.0	88.0	58.0	LANYON Dr
4135 - 4136	9 0	5	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	88.2	58.0	LANYON Dr
4136 - 4134	9 0	8	87.6	0.0	0.3	0.0	0.0	0.0	0.3	0.0	88.5	58.0	LANYON Dr
4134 - 2768	9 0	25	87.6	0.0	1.0	0.0	0.0	0.0	1.0	0.0	89.5	58.0	LANYON Dr
2768 - 3188	9 0	412	87.6	0.0	16.9	0.0	0.0	0.0	16.9	0.0	106.5	58.0	LANYON Dr
3188 - 4144	9 0	11	87.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	106.9	58.0	LANYON Dr
4144 - 4142	9 0	6	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	107.2	58.0	LANYON Dr
4142 - 4143	9 0	6	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	107.4	58.0	LANYON Dr
4143 - 4139	9 0	11	87.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	107.9	58.0	LANYON Dr
4139 - 4147	9 0	187	87.6	0.0	7.7	0.0	0.0	0.0	7.7	0.0	115.6	58.0	-- no name --
4147 - 4151	9 0	10	87.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	116.0	58.0	LANYON Dr
4151 - 4149	9 0	6	87.6	0.6	0.2	39.0	0.0	0.0	0.2	39.0	116.2	97.0	LANYON Dr
4149 - 4150	9 0	5	87.6	0.0	0.2	0.0	0.0	0.0	0.2	0.0	116.4	97.0	LANYON Dr
4150 - 4148	9 0	9	87.6	0.0	0.4	0.0	0.0	0.0	0.4	0.0	116.8	97.0	LANYON Dr
4148 - 3409	9 0	1571	87.6	0.0	64.6	0.0	0.0	0.0	64.6	0.0	181.4	97.0	LANYON Dr
3409 - 3410	9 0	42	88.2	0.0	1.7	0.0	0.0	0.0	1.7	0.0	183.1	97.0	LANYON Dr
3410 - 3485	7 4	9	68.2	0.4	0.5	86.0	38.3	27.0	38.8	113.0	221.8	210.0	LANYON Dr
3485 - 2097	7 0	7	66.1	0.0	0.4	0.0	0.0	0.0	0.4	0.0	222.2	210.0	LANYON Dr
2097 - 3486	7 0	17	68.2	0.0	0.9	0.0	0.0	0.0	0.9	0.0	223.1	210.0	LANYON Dr
3486 - 2098	7 0	17	68.2	0.0	0.9	0.0	0.0	0.0	0.9	0.0	224.0	210.0	LANYON Dr
2098 - 2095	7 0	16	67.0	0.0	0.9	0.0	0.0	0.0	0.9	0.0	224.9	210.0	LANYON Dr
2095 - 3276	7 0	9	67.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	225.4	210.0	THARWA RD
3276 - 2769	7 0	31	67.4	0.0	1.7	0.0	0.0	0.0	1.7	0.0	227.0	210.0	THARWA RD
2769 - 2770	7 0	58	67.4	0.0	3.1	0.0	0.0	0.0	3.1	0.0	230.1	210.0	THARWA RD
2770 - 5173	8 0	249	77.4	33.2	11.6	27.0	0.0	0.0	11.6	27.0	241.7	237.0	THARWA RD
5173 - 5601	8 0	1110	77.4	68.9	51.6	58.0	1.6	0.0	53.2	58.0	294.9	295.0	THARWA RD

Modelled Totals	5025	61.3	237.5	57.4	294.9
Observed Totals			0.0	295.0	0.0

Observed Journey Time =	295.00	Implied Average Speed =	61.3
Modelled Journey Time =	294.92	Modelled Average Speed =	61.3
	99.97%		100.03%

JURNEY terminated successfully